

1906



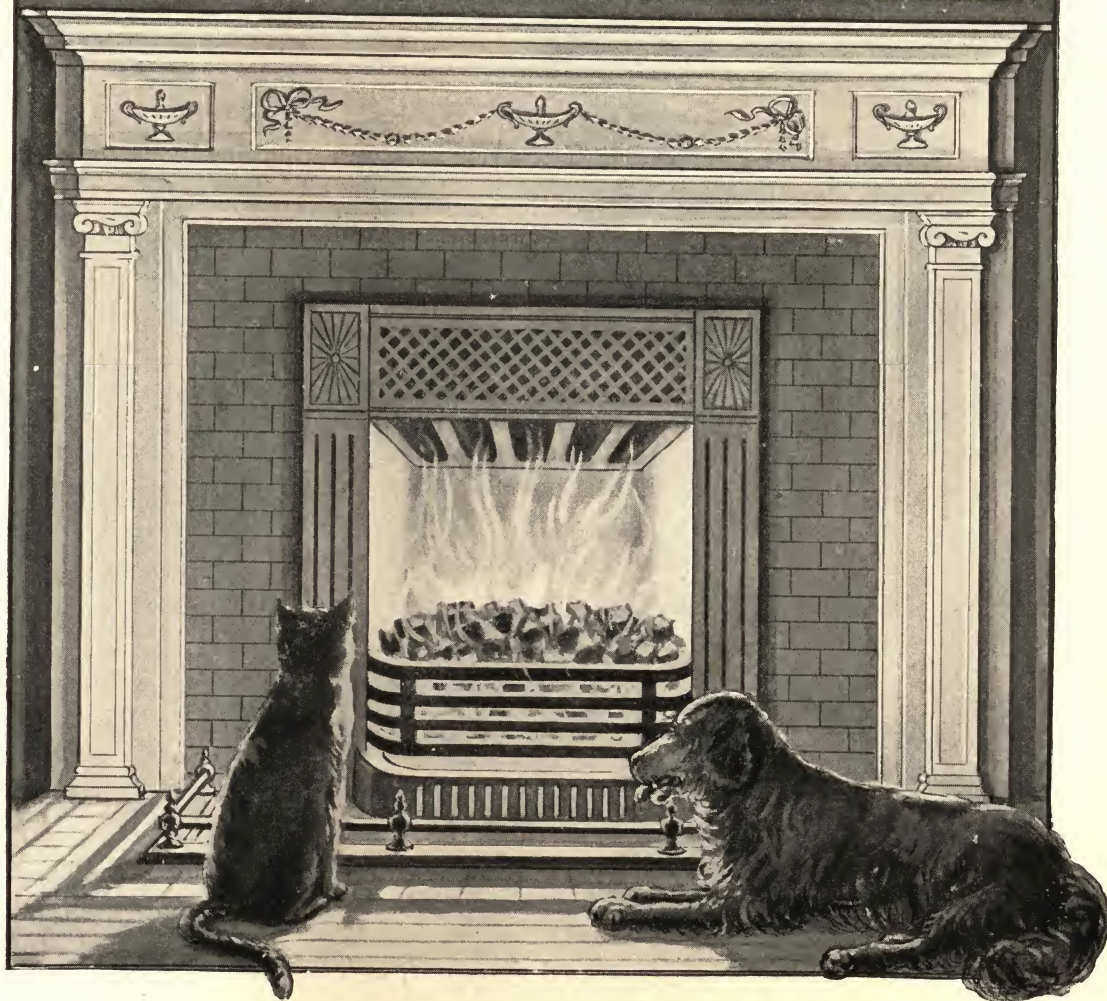
THE
Jackson
VENTILATING GRATE

Ella Striker Mapes says in *The Outlook* (Oct. 18, 1902) :

"A great many people have said a great many things about the influence of an open fire—and said them much better than I could ; but I don't believe any poet ever felt the charm of one more than I do, though I'm only an ordinary being. For me the mere act of stretching my feet out on a glowing hearth is enough to liberate my thoughts. When the snow is thickly falling out in the still coldness, then, if your hair is silvered, how you lose the present in the past ; or if your locks still hold the gloss of youth, how you dream, perchance, of the future !

"Is it any wonder that such witchery dwells in the material which nature has stored with her enchantments ? Just think of how those snapping logs once rose out of the rich brown earth, topped with rustling green, echoing with bird-songs, bending perhaps over some cool lake."

Catalogue of Ventilating Grates for the Year 1906.
Edwin A. Jackson & Bro., 50 Beekman St., New York.



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Supplementary sheets showing other and more elaborate designs of Ventilating Grates will gladly be forwarded. Special designs will be made when required at a reasonable extra cost.

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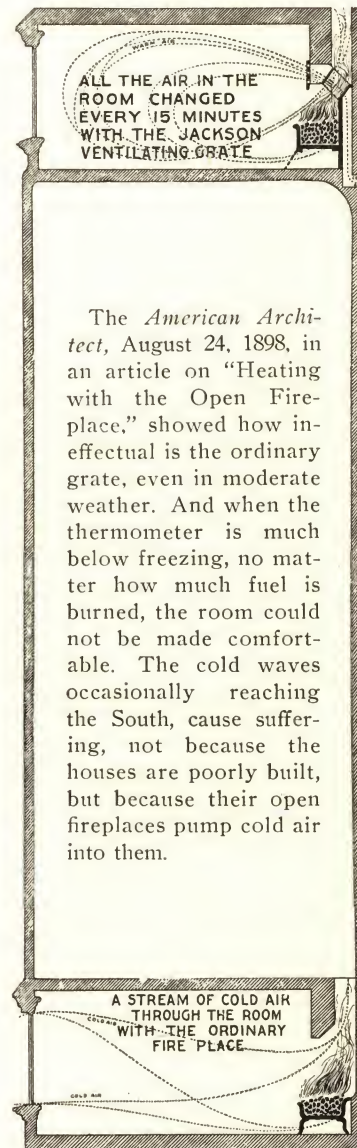
NOTE: This Catalogue is devoted mainly to the Jackson Ventilating Grates, and the fixtures that may be used with the Grates. Other forms of fireplace fixtures, including regular open fireplaces, mantels, tiles, wrought or brass andirons, etc., are shown in separate catalogues. These will be forwarded on application.

INTRODUCTION.

IT is acknowledged by all authorities on the subject that the only healthful fires are those of the open fireplace. Apart from the cheerful, exhilarating influence of the open fire on the household gathered about its hospitable hearth, it is well known that radiant heat direct from the surface of burning fuel possesses a health-maintaining power that no other form of heat can supply. For this reason the open grate has always been a favorite in our homes, and it is only because in the ordinary form it is such a great consumer of fuel, and so feeble in its heating capacity, that it has been supplanted by other more economical kinds of heating apparatus.

In the construction of the Jackson Ventilating Grate it will be seen that this defect has been avoided, and an economical method of heating has been secured, without the least impairment of the properties of the open fireplace. The Jackson Ventilating Grate has all the exposed fire surface of the common grate, thus being unsurpassed in the amount of its radiant heat, as it is unequaled by any in its amount of conserved heat.

Another charm of the open fireplace is in its office as a ventilator of dwellings. Gen. Morin says that in a room of 20 feet square and 12 feet high, heated by an open grate, "with a good fire, the air would be removed four or five times an hour with a moderate draft of the chimney." How utterly impossible is it in a room thus heated to suffer from vitiated or impure air! But with the common grate, unfortunately, the supply of air to meet this draft must enter the building through the cracks and crevices surrounding the doors and windows, and it comes into the room at times freezing cold. This draft is entirely prevented by the Ventilating Grate, and yet because of the pure air introduced through the frieze of the grate itself, the ventilation is far superior to other forms of open fires.



EXPLANATION.

THE principle applied in these grates is the same as that of the furnace, combined with the direct radiation of the open fire. The result is that one of these grates will heat two or three rooms with fuel that, in an ordinary grate, would not warm one room. The grate is, practically, a furnace set directly in the room. There is not the immense loss of heat in the cellar and in the ascending hot-air pipe, and because of this saving, these grates will heat a residence with two thirds the fuel of a furnace. They will heat a home with less fuel than any other good system. Send sketch plan, showing sizes, that we may estimate on entire heating.

There are two forms, the Concord heating the one room in which it is situated (or adjoining rooms by means of open doors), this form being shown on pages 3, 6 and 8. The Oliver pattern, as shown on pages 7 and 9, has a connection by which rooms in back or above can be heated. Either pattern in No. 3 size will heat 7,000 cubic feet, with average exposure.

If the grate is not depended upon for heating in severe weather, and a cellar heater is already in place, a Ventilating Grate will still be a comfort and economy. In spring and fall, the furnace is wasteful in fuel, and makes the house close and stuffy. Then one grate will pleasantly heat an entire residence. In mid-winter, one is most valuable for heating an extension or exposed corner, or for general cheer and ventilation.

In comparing the cost of this grate with that of other makes, it should be remembered that the Ventilating Grate is not an ordinary open fire, but, in addition, a strong fireplace heater. Other dealers, because of bigger profits, may offer substitutes claiming equal merit, but in every case the claims fail when trial is made. The Ventilating Grates not only give four times the heat of other open fires, using the same fuel, thus repaying their cost, but they are more durable.

Our Ventilating Grates will last a lifetime, and with ordinary care they will need no repairs at all for a dozen years or more, and then only a bottom, or fire brick. The total cost for repairs has not averaged over four cents per year, per grate, during twenty years' use.

It works admirably with any kind of fuel—wood, coal (hard or soft), coke or natural gas.

It keeps fire from fall till spring, and will run over 24 hours without any attention.

It is more safe in wood mantels than any other grate or fireplace heater.

Its air supply, being not overheated, is far more pleasant and healthful than that of a furnace.

The ventilation is more perfect than with any other system.

They are surpassed by none in the world in excellence of finish and beauty of designs.

In every way they are highest grade, and they have no superior in design or finish; in fact, the handsomer patterns have been placed in some of the finest residences especially because of their decorative and ventilating value.

TESTIMONIALS.

THOSE who contemplate using any invention or appliance different from that which their forefathers used need to have in these *obvious* features of merit to make them appeal as worthy of trial. The JACKSON VENTILATING GRATE certainly possesses such obvious features of merit. A simple glance at the rear view of the Grate, as shown on the following page, associated with the thought that the large surface shown is a *heating surface greater than the majority of stoves* that are in use, and equal to many of the hot air furnaces, could scarcely fail to carry conviction to the average mind that here indeed is the "*Grate that heats.*" If a furnace in the cellar, properly fitted with a cold air box, to supply air as a bearer of heat to the rooms in the house above, is a desirable heater, certainly a FURNACE IN THE FIREPLACE is a much more desirable heater. And so without question thoughtful men have for more than twenty years bought the JACKSON VENTILATING GRATE and commended it to their friends, and now there is scarcely a town in *The United States* that has not at least one resident to tell the story. For many years we printed these interesting reports as they came to us from delighted patrons, until they became "too numerous to print." Let us, however, preserve for reference one man's transactions, that tell THE WHOLE STORY better than a VOLUME OF TESTIMONIALS.

John H. Converse, Vice-President of the Baldwin Locomotive Works, Philadelphia, Pa., has the following record on our books:

No. 1. Mr. Converse, when he built his residence at Rosemont, Pa., purchased four of the Jackson Ventilating Grates.

No. 2. Next year Mr. Converse bought two Ventilating Grates for the Parsonage of the Presbyterian Church at Rosemont, Pa.

No. 3. Seven years later Mr. Converse directed the purchase of two Ventilating Grates for the Convalescents' Ward of the Hospital at Burlington, Vt.

No. 4. Nine years thereafter Mr. Converse directed the purchase of sixty-three Ventilating Grates for the Presbyterian Hospital, then being built at 38th Street and Powellton Avenue, Philadelphia, Pa.

No. 5. The following year Mr. Converse bought nine Ventilating Grates for his residence at Burlington, Vt.

No. 6. The next summer Mr. Converse presented to the Art Gallery at Rosemont, Pa., two of the Jackson Ventilating Grates.

No. 7. Finally, Mr. Converse directed the purchase of twenty-one Jackson Ventilating Grates for the Convalescents' House, a branch of the Presbyterian Hospital, at Devon, Pa.

Mr. Converse is a man who works for perfection in another form of heating, *i. e.*, Locomotives that sell all over the world, and the perfection of the Ventilating Grate appealed to him. By him the problem of the burning of fuel for the utilization of the greatest amount of heat had been a lifelong study, and when he was made aware of the unparalleled heat-saving power of the Ventilating Grate he expressed both surprise and gratification, and the foregoing history practically demonstrates his conclusions.

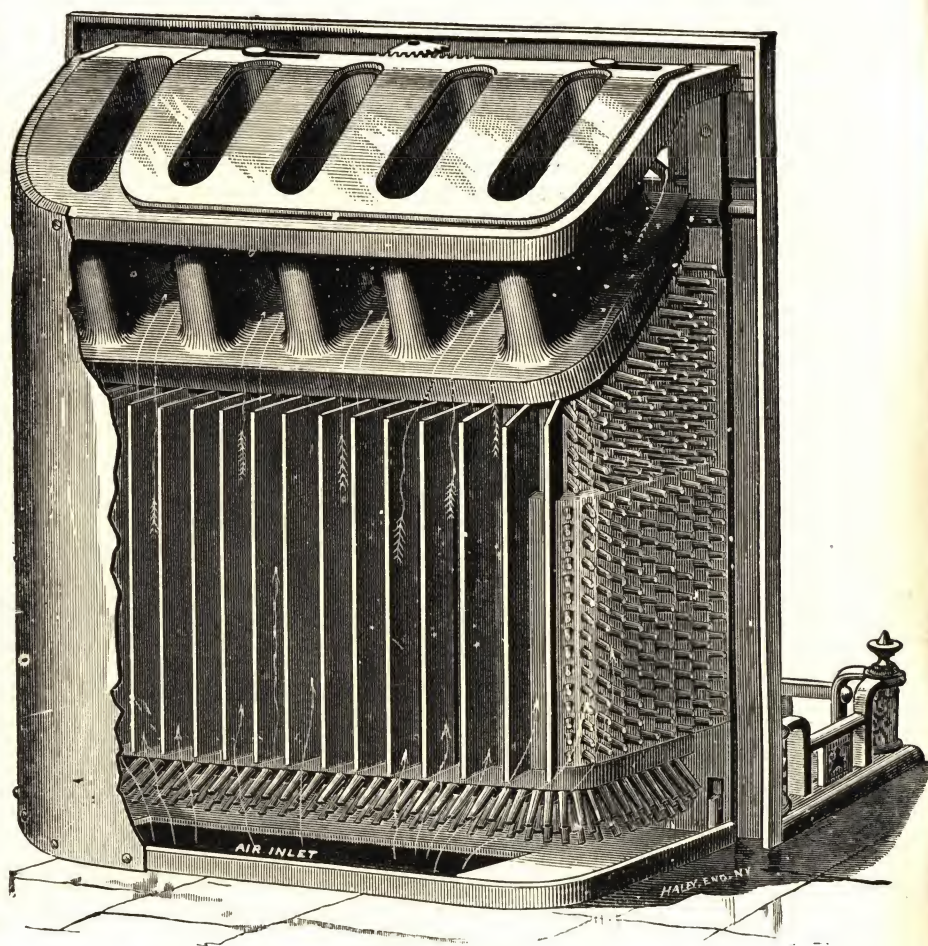
Moral.—A wealthy man's house demands excellence of workmanship; an art gallery, beauty of design; a hospital, perfection of ventilation; an expert in heating, economy in fuel. By the way, all these qualifications in a heating apparatus are desirable in every man's home.

Reports from some one near to every reader will gladly be forwarded.

CONCORD I PATTERN.

AS stated on page 4, there are two forms of the Ventilating Grates, the Concord and the Oliver. The adjoining cut shows the construction of the heat-saving chambers in the Concord pattern, the outer shell being in part broken away. Pure air from outdoors is admitted through the opening shown in the base, and is distributed by the heated spurs to the spaces directly back of and on the sides of the fire. From these the air enters the chamber shown at the top of the cut, through which the five smoke-flues are seen to pass. These also impart a large portion of their heat, and there passes a current of pure warm air directly into the room through the openings shown in the frieze of the Grate. The chambers are separated from the fire by a cast-iron back that has no joints for leaking gas. Surrounded as it is by air-chambers, it can never become intensely heated, and thus cannot burn out. The Grate will accomplish more heating than four ordinary grates of the same size.

The construction of the Grate is such that it is a perfect ventilator. In winter, with a full fire and with the doors and windows closed, the whole atmospheric contents of large rooms are replaced by pure warm air every twenty minutes.



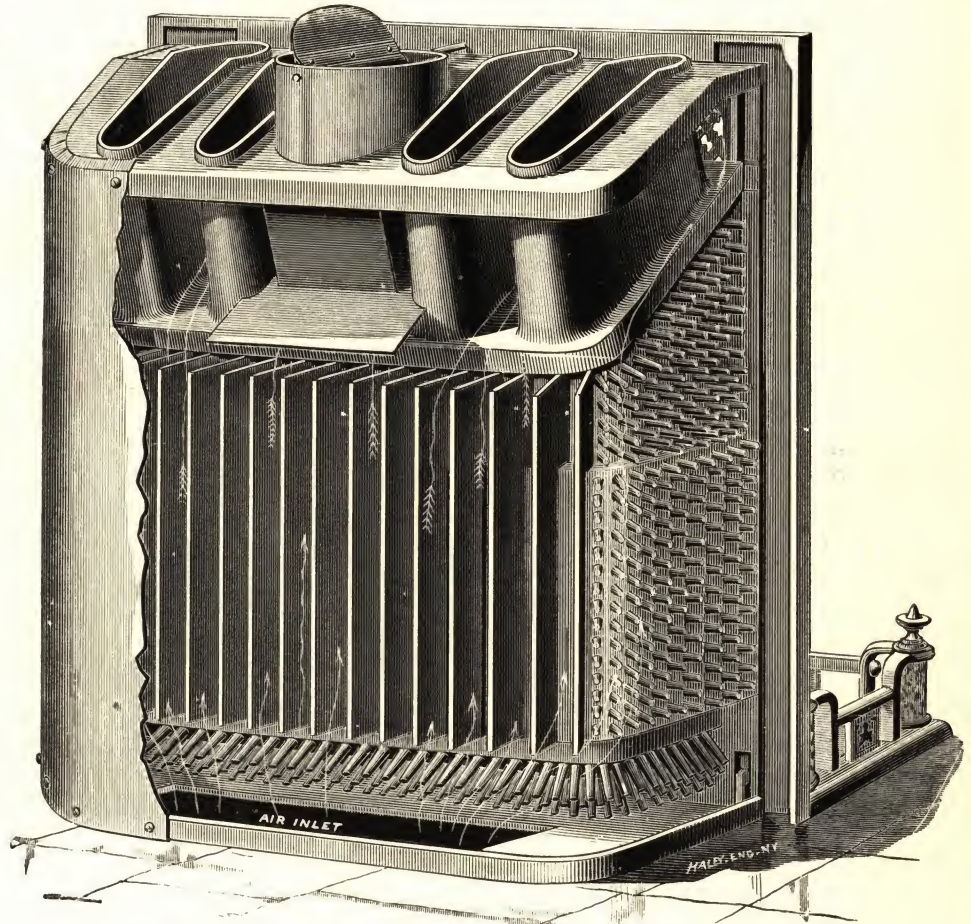
Rear view of Concord pattern. Designs 31-71 inclusive.
(With outside galvanized iron covering partly broken away to show interior construction.)
Note the great amount of heating surface.

OLIVER PATTERN.

THIS cut shows the construction of the heat-saving chambers in the Oliver Grate, which is the form intended to heat rooms on different floors. It will be readily seen that the air, directly admitted from outdoors, after becoming heated by the chambers, as described in the Concord pattern, passes through the opening at the top of the cut, and thence by a pipe (see section, page 9) to the room on the floor above. Closing the valve, wholly or in part, the conserved heat may be entirely or partially added to the full radiant heat of the open fire to heat the room containing the Grate. It will thus comfortably heat two ordinary rooms in the most severe winter weather, or several rooms on each floor in milder weather. It can also be arranged to heat a room back of Grate if desired. There is a damper (not shown in the cut) that closes over the smoke vents to regulate the draft.

The hot air pipe should be of No. 24 galvanized iron, $5\frac{1}{2}$ inch diameter. Severe tests and many years of experience prove that the pipe will last a dozen years or more, when it can easily be replaced. See page 9.

When the smoke flue is too small to admit the hot air pipe of the Oliver, as shown in plate 5, good results can be had by using a Concord, and placing a register in the ceiling just above the Grate.



Rear view of the Oliver pattern. Designs 31-71 inclusive.
(With outside galvanized covering partly broken away to show interior construction.)

CONCORD SECTION.

THIS sectional view shows the Concord Grate, which is the form heating on one floor only. Both this, and the Oliver, can be had in all designs, 31 to 71 inclusive. See page 6 for view showing heating surfaces.

An air supply should always be made with the outside of the house. Not only does this insure better ventilation, but also more perfect heating. Do not be deceived with the talk of those who say "Plenty of air gets into the house through doors and cracks." The Ventilating Grate stops the cold drafts that usually exist, but improves the ventilation.

Note the sectional view with the descriptive paragraph on page 3. It is better to bring the air in warm, than to heat it after you get it into the room. If the cellar be clean, air may be taken from this, but it is preferable that it be secured directly from outdoors, as in plate No. 5, or by a pipe, as in plate No. 3. Send a sketch plan, showing arrangement of rooms, with points of compass, and we will advise you as to the best method of securing the air supply.

Who does not conjure a delightful picture from the *Reveries of a Bachelor*, where he says:

"As for the fire, I keep the little hearth so hot as to warm half the cellar below, and the whole space between the jambs roars for hours together with white flame. * * * As night approaches, I have a huge pile of oak and hickory placed beside the hearth; I put out the tallow candle on the mantel, then, drawing my chair directly in front of the blazing wood, and setting one foot on each of the old fire-dogs (until they grow too warm) I dispose myself for an evening of such sober and thoughtful quietude, as I believe, on my soul, that very few of my fellowmen have the good fortune to enjoy."



Plate 3, showing manner of constructing the Fresh-Air Duct when the fireplace is situated in an interior wall of the house.

OLIVER SECTION.

THIS cut shows a section of the Oliver form of Ventilating Grate, designs 31 to 71 inclusive. Air entering at the cold air inlet is heated as it passes over the back, and enters the room through the register in the front of the Grate, and passes also to the room on the floor above. The heat may all be turned upstairs if desired, or part to each room.

Two rooms on the floor above may be heated if they are not unusually large. The volume of warm air entering is equal to over 180 cubic feet per minute. This, with the radiation from No. 3 size, will heat about 7,000 cubic feet space in mid-winter.

The air supply can be piped, as in Plate No. 3, if desired.

The ashpit connection is not essential, and ashpan is sent if preferred. However, when the Grate, whether Concord or Oliver, is on the first floor, it will be found a convenience to have an ashpit, as shown in Plate No. 5.

The price of all our regular grates includes valve to regulate cold air supply, valve over the top to regulate the draft, also blower for starting the fire. The Oliver includes also valve for turning heat up or down stairs, the register and register box for one room, also the first joint of pipe.

Extra pipe, 5½ inch diameter, No. 24 gauge galvanized iron, costs 20c. a foot.

Registers are 8x10 inches, black japanned. Extra registers, when wanted, cost \$1.00; and the register box and connecting elbow cost 50 cents extra.



DESCRIPTION OF FINISH.

WE can give any style of finish to the frames that may be desired, the costs varying with the style selected. Aside from personal preferences, the frame should harmonize with the rest of the hardware of the room. Certain finishes are particularly appropriate with a given design, such as numbers 40 and 70 in the rustless, or 55 in the dull brass, or 69 in silver. If you will state the finish preferred we shall be glad to offer suggestions.

Black finish is that given to ordinary grates, and is especially adapted for places where utility chiefly is the thing desired. It can be had in lustre, which is similar to stove blacking, or in black similar to wrought iron finish. The former is most durable, the latter looks better.

Rustless finish is that *produced* by the Bower-Barff process of oxidizing iron, by which the surface is converted into the magnetic (or black) oxide. The surface thus treated takes a dead-black hue, which is pleasing in appearance, and is not liable to change by use or exposure.

Enamel finish is an enameled glossy surface, given by the application of successive coats of japan, that are baked on by the heat of an oven adapted for the purpose. All colors usually seen on bicycle frames can be secured. The cost is the same as for rustless.

Triple plated finish is produced by heavily plating the finely polished surface of the metal, and thereafter highly polishing the plated surface. Nickel, brass and bronze, in bright or oxidized finishes, can be had. This finish is far superior to the usual plating.

Solid brass or bronze. These are solid castings of either brass or bronze, and they may be finished in a perfect polish, or in any other style desired. For durability, elegance of appearance and excellence of workmanship, they are unsurpassed; and by few firms are they equaled, they being finely chased by hand.

Special finishes to match the hardware can be secured, including silver and gold plating.

NOTE: In all finishes excepting black, the basket and ash-screen are nickel-plated; also fender knobs and rails are brass, unless ordered otherwise.

SIZES.

No. 1 is the standard. Nos. 3 and 5 have greater heating power; the No. 0 size has less. We recommend the No. 3 size as being the most desirable. Special sizes can be made to order.

These sizes do not apply to designs 82 or 90, 91, 92 or 93. See those plates for statement of sizes.

OUTSIDE OF FRAME			GRATE OPENING.		*BRICKWORK TO RECEIVE GRATE.		
No.	Wide.	High.	Wide.	Deep.	Wide.	High.	Deep.
0	27 in.	30¼ in.	18½ in.	13 in.	24 in.	30 in.	14½ in.
1	30½ "	30¼ "	22 "	†13 "	28 "	30 "	14½ "
3	32½ "	33¼ "	24 "	†13 "	30 "	33 "	14½ "
5	40½ "	33¼ "	32½ "	13 "	38 "	33 "	14½ "

*The brickwork is usually made about 12 inches deep, the facing adding 2 inches or more, making total about 15 inches.

†Depth can be reduced to 10 inches by ordering basket shown in Plate 70. We recommend, however, that basket and crown as shown in Plate 31 be selected for all designs of frames.

DIRECTIONS FOR SETTING THE GRATE.

The Grates can be used successfully in any fireplace, old or new, that has at least a fairly good draft.

With every shipment of Grates, or upon application at any time, we mail a templet with special directions for setting the Grate, by which any ordinary bricklayer can easily perform the work. No special flue need be built, as the Grates can be set in any fireplace already built.

One flue carries the smoke and the hot air pipe, as shown in Plate 5. This pipe usually lasts twelve to twenty years, when it can easily be renewed.

The ideal flues for these Grates are without sharp turns; inside size about 8x12 for the Oliver, and about 8x8 inches for the Concord. The Grates can be adjusted to other sizes. For soft coal also the Number 5 size, the flues should be slightly larger.

Special plans for flue construction for new houses will be forwarded if required, but special construction is not necessary.

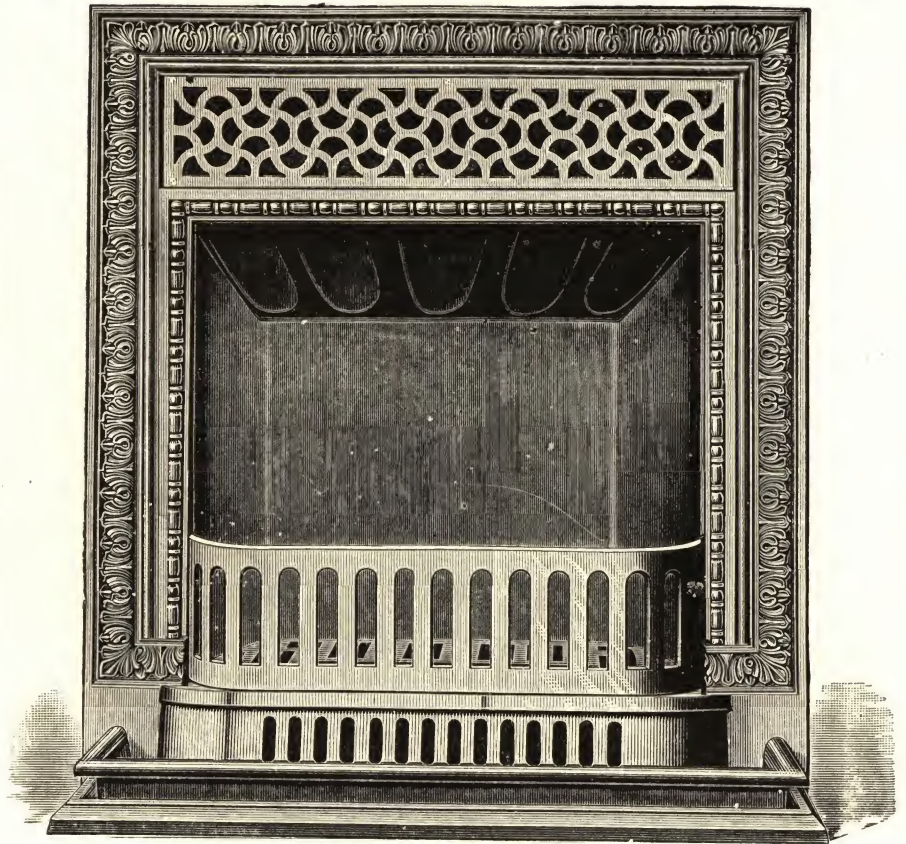
These Grates burn better than other open fires, especially the Concord pattern. Those who have smoky fireplaces will find it advantageous to send information, sizes, etc., that we may see whether the Ventilating Grate can be used successfully.

The Grate can be removed and reset in the same or another fireplace without disturbing the mantel, tile or brickwork. Most people, when moving to a new residence, take their Ventilating Grate with them.

Grate No. 31, "Classic."

Weights for Shipment.

The Ventilating Grates are carefully boxed, and delivered on cars or boat, at New York. The grates go as third-class matter; the weight is about 400 lbs., except for No. 5 size, which is 500 lbs. Fenders and other fixtures are packed separate, but when shipped at the same time as the grate, freight charges are light.



Net Cost of Grate No. 31 in No. 0 or No. 1 Size.

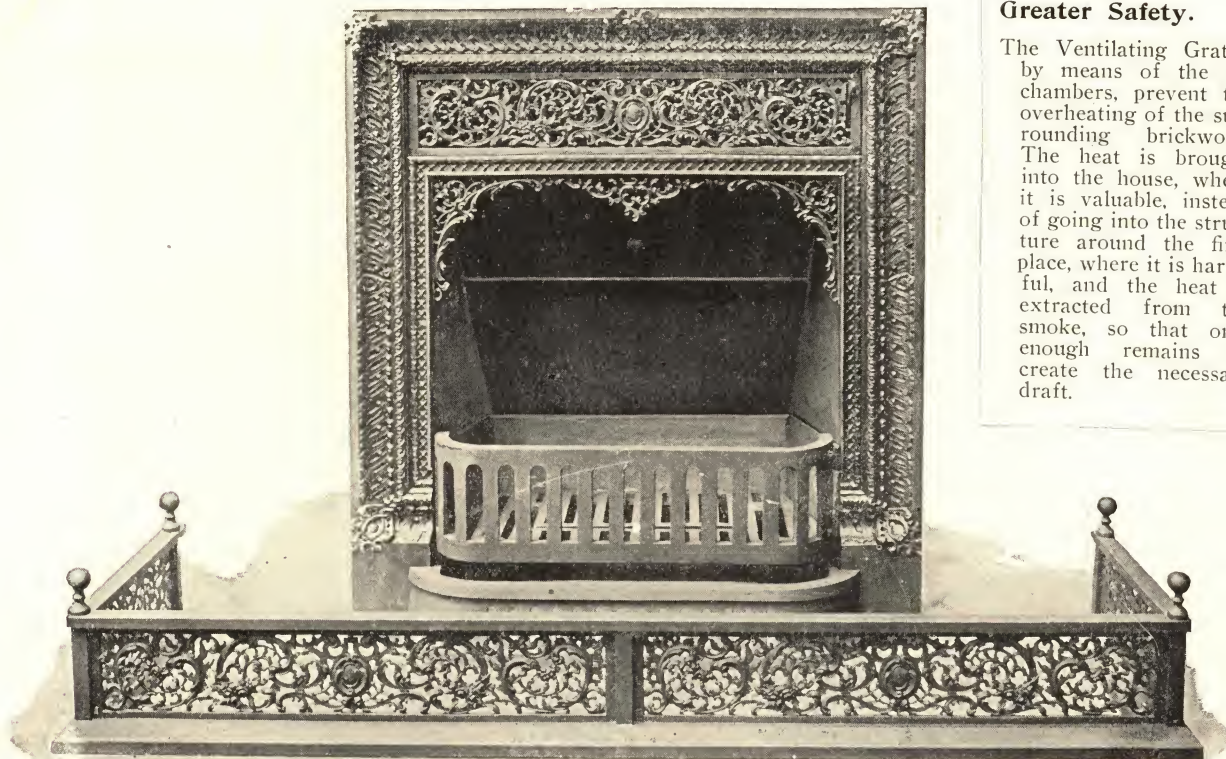
(Add \$5 extra for No. 3 size Grate.)

Concord Grate,	Black, \$40.00	Rustless, \$47.00	Plated, \$57.00	Solid Brass, \$84.00
Oliver "	" 46.00	" 53.00	" 63.00	" 90.00
Fender is extra,	" 4.00	" 5.00	" 9.00	" 11.00

Grate No. 32. "Rococo."

**More Heat,
Greater Safety.**

The Ventilating Grates, by means of the air chambers, prevent the overheating of the surrounding brickwork. The heat is brought into the house, where it is valuable, instead of going into the structure around the fireplace, where it is harmful, and the heat is extracted from the smoke, so that only enough remains to create the necessary draft.



Net Cost of Grate No. 32 in No. 0 or No. 1 Size.

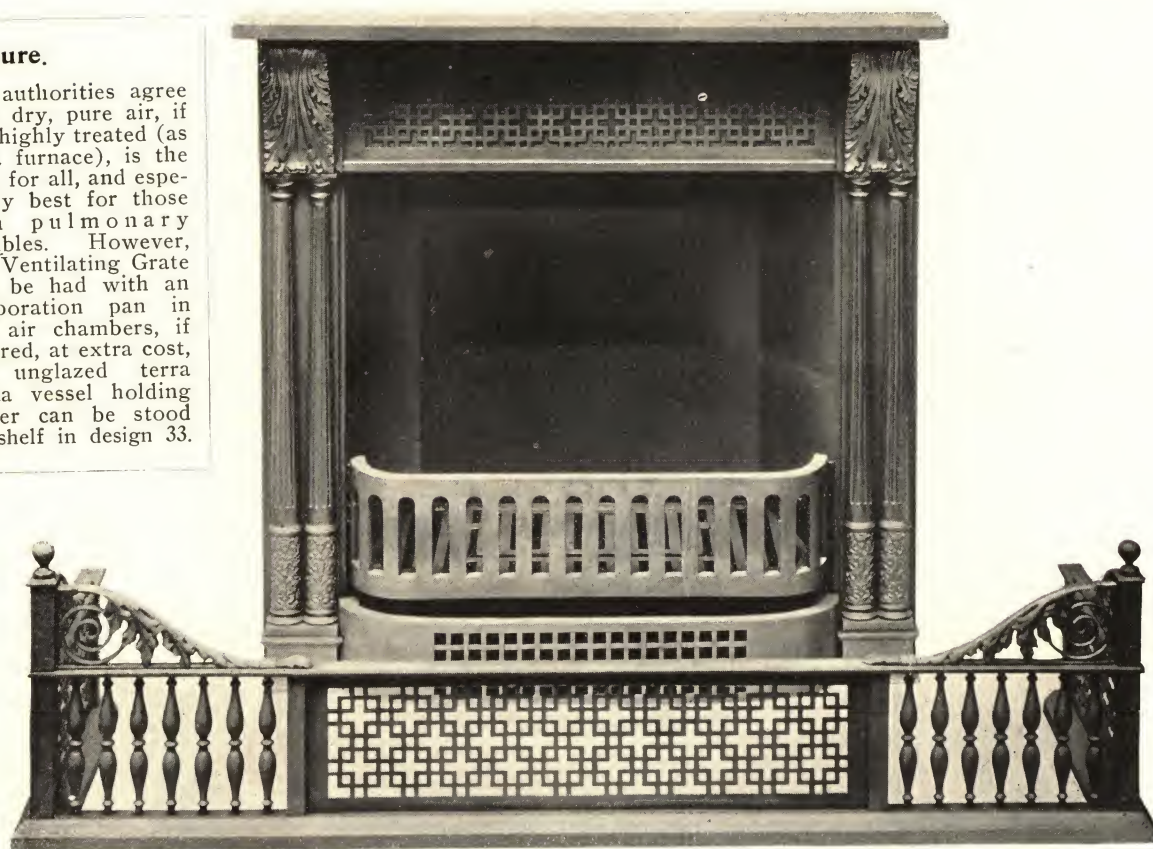
(Add \$5 extra for No. 3 size Grate.)

Concord Grate,	Black,	\$44.00	Rustless,	\$51.00	Plated,	\$57.00	Solid Brass,	\$84.00
Oliver	"	50.00	"	57.00	"	63.00	"	90.00
Fender is extra,	"	12.00	"	15.00	"	19.00	"	27.00

Grate No. 33. "Doric."

Moisture.

Most authorities agree that dry, pure air, if not highly treated (as in a furnace), is the best for all, and especially best for those with pulmonary troubles. However, the Ventilating Grate can be had with an evaporation pan in the air chambers, if desired, at extra cost, or unglazed terra cotta vessel holding water can be stood on shelf in design 33.

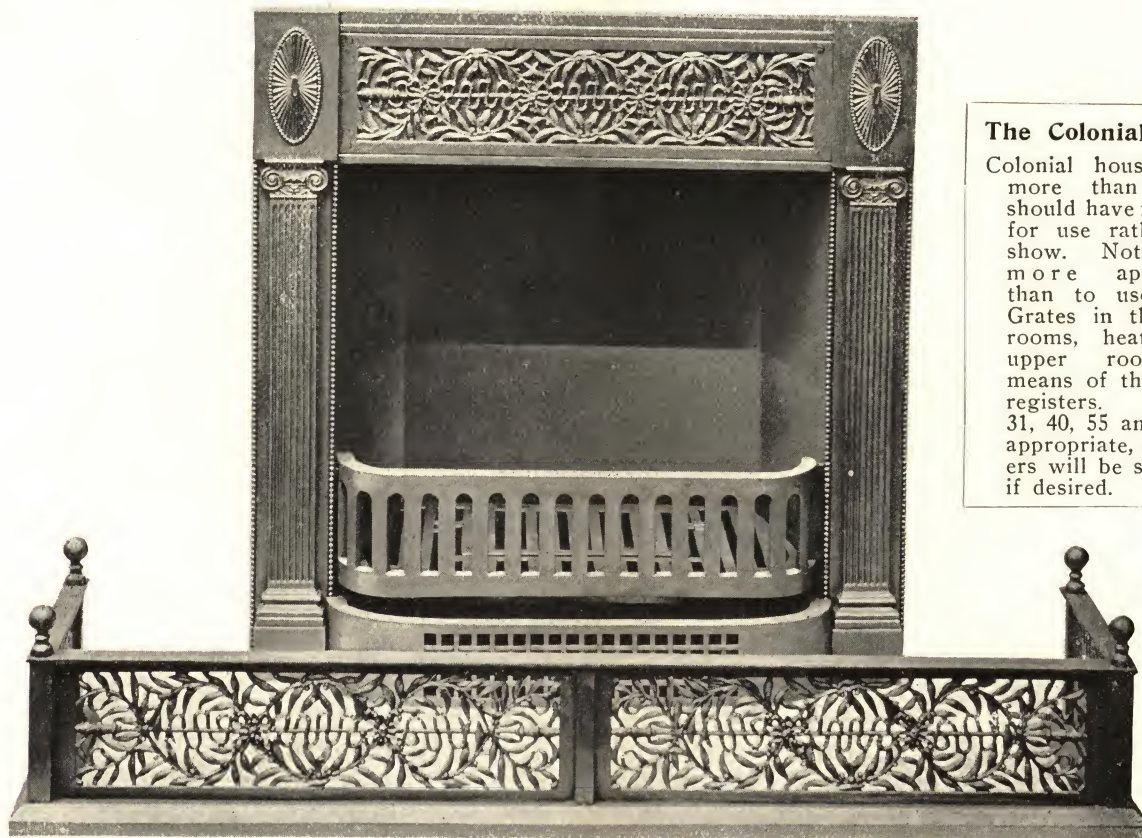


Net Cost of Grate No. 33 in No. 0 or No. 1 Size.

(Add \$5 extra for No. 3 size Grate; \$20 extra for No. 5 size.)

Concord Grate,	Black,	\$49.00	Rustless,	\$56.00	Plated,	\$64.00	Solid Brass,	\$95.00
Oliver	"	55.00	"	62.00	"	70.00	"	101.00
Fender is extra,	"	22.00	"	25.00	"	33.00	"	55.00

Grate No. 40 "Ionic."



The Colonial Style.

Colonial houses, even more than others, should have fireplaces for use rather than show. Nothing is more appropriate than to use Oliver Grates in the lower rooms, heating the upper rooms by means of the hot-air registers. Designs 31, 40, 55 and 69 are appropriate, and others will be submitted if desired.

NOTE.—In all finishes this design has real brass beading on either side of pilaster, unless ordered otherwise.

Net Cost of Grate No. 40 in No. 0 or No. 1 Size.

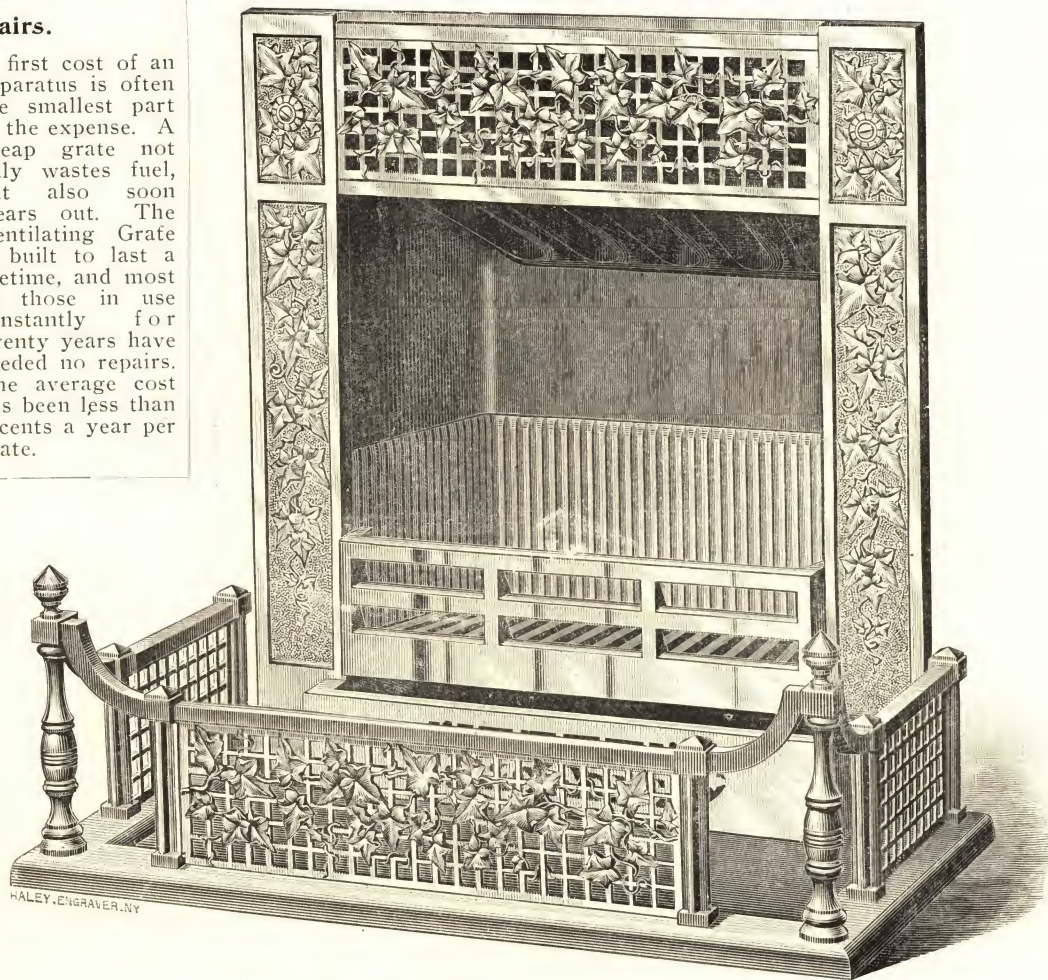
(Add \$5 extra for No. 3 size Grate; \$20 extra for No. 5 size.)

Concord Grate,	Black, \$47.00	Rustless, \$53.00	Plated, \$56.00	Solid Brass, \$90.00
Oliver " "	" 53.00	" 59.00	" 62.00	" " 96.00
Fender is extra,	" 13.00	" 16.00	" 24.00	" " 30.00

Grate No. 46. "Naturalistic."

Repairs.

The first cost of an apparatus is often the smallest part of the expense. A cheap grate not only wastes fuel, but also soon wears out. The Ventilating Grate is built to last a lifetime, and most of those in use constantly for twenty years have needed no repairs. The average cost has been less than 4 cents a year per grate.

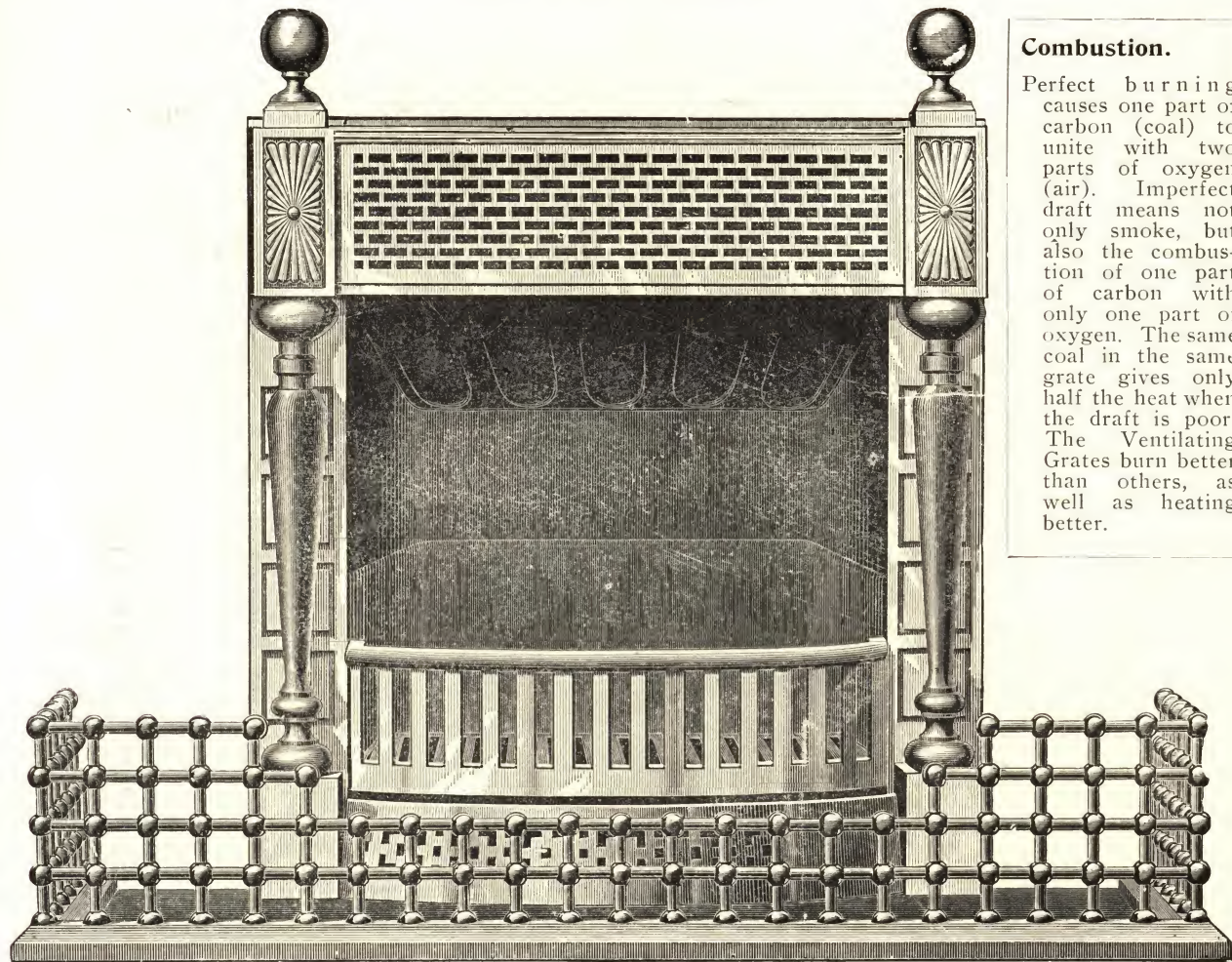


Net Cost of Grate No. 46 in No. 0 or No. 1 Size.

(Add \$5 extra for No. 3 size Grate; \$20 extra for No. 5 size.)

Concord Grate,	Black, \$44.00	Rustless, \$50.00	Plated, \$54.00	Solid Brass, \$83.00
Oliver " "	" 50.00	" 56.00	" 60.00	" " 89.00
Fender is extra,	" 15.00	" 19.00	" 26.00	" " 33.00

Grate No. 55. "Colonial."



Combustion.

Perfect burning causes one part of carbon (coal) to unite with two parts of oxygen (air). Imperfect draft means not only smoke, but also the combustion of one part of carbon with only one part of oxygen. The same coal in the same grate gives only half the heat when the draft is poor. The Ventilating Grates burn better than others, as well as heating better.

MALEY ENG. N.Y.

Net Cost of Grate No. 55 in No. 1 Size.

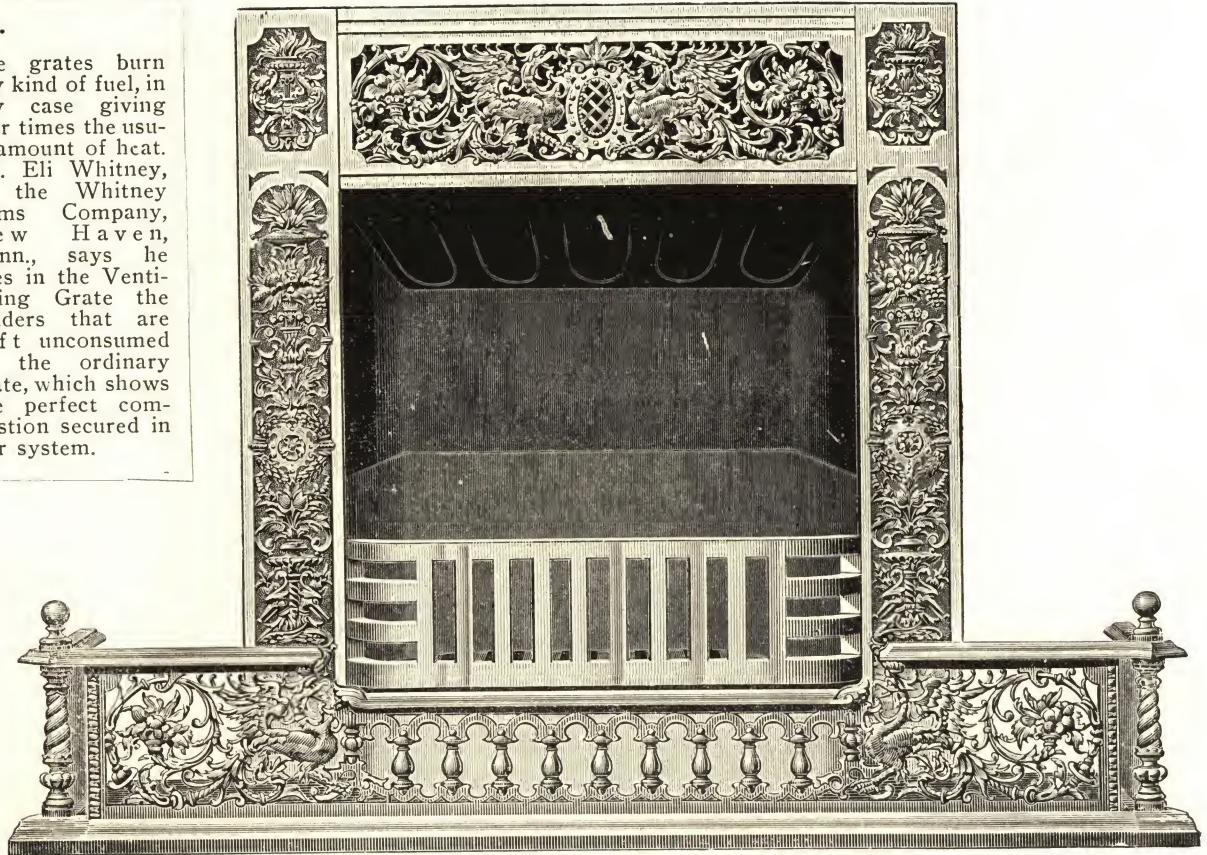
(Add \$5 extra for No. 3 size Grate; \$20 extra for No. 5 size.)

Concord Grate,	Black,	\$85.00	Rustless,	\$95.00	Plated,	\$105.00	Solid Brass,	\$125.00
Oliver "	"	91.00	"	101.00	"	111.00	"	131.00
Fender is extra,	"	25.00	"	30.00	"	38.00	"	41.00

Grate No. 65. "German."

Fuel.

These grates burn any kind of fuel, in any case giving four times the usual amount of heat. Mr. Eli Whitney, of the Whitney Arms Company, New Haven, Conn., says he uses in the Ventilating Grate the cinders that are left unconsumed in the ordinary grate, which shows the perfect combustion secured in our system.



Net Cost of Grate No. 65 in No. 0 and No. 1 Size.

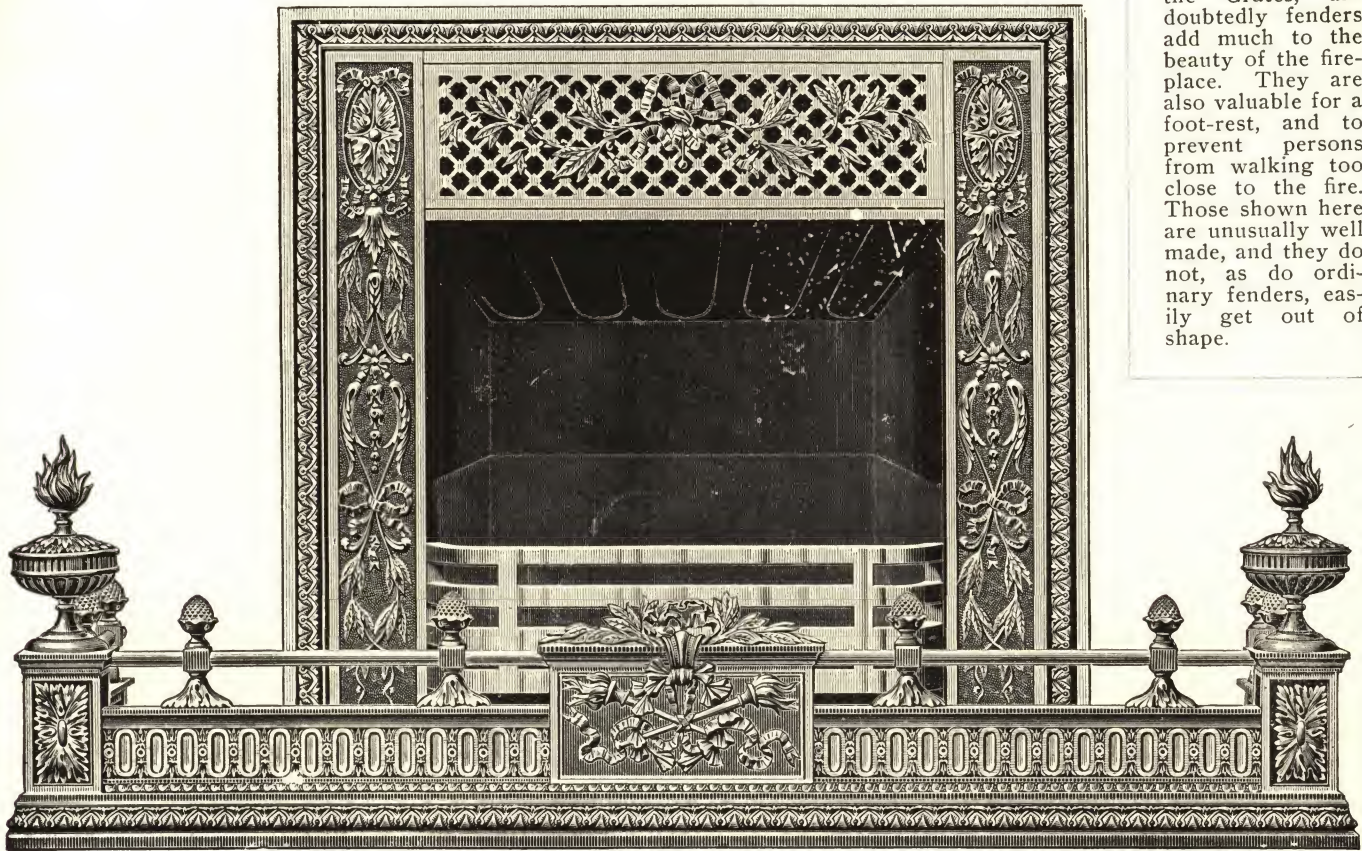
(Add \$5 extra for No. 3 size Grate; \$20 extra for No. 5 size.)

Concord Grate,	Black,	\$44.00	Rustless,	\$50.00	Plated,	\$54.00	Solid Brass,	\$83.00
Oliver, "	"	50.00	"	56.00	"	60.00	" "	89.00
Fender is extra,	"	26.00	"	28.00	"	38.00	" "	55.00

Grate No. 69. "Renaissance."

Fenders.

While not necessary for the working of the Grates, undoubtedly fenders add much to the beauty of the fire-place. They are also valuable for a foot-rest, and to prevent persons from walking too close to the fire. Those shown here are unusually well made, and they do not, as do ordinary fenders, easily get out of shape.



NOTE.—This frame is 3 inches wider and 1½ inches higher than regular sizes, because of the molding around the frame.

Net Cost of Grate No. 69 in No. 1 Size.

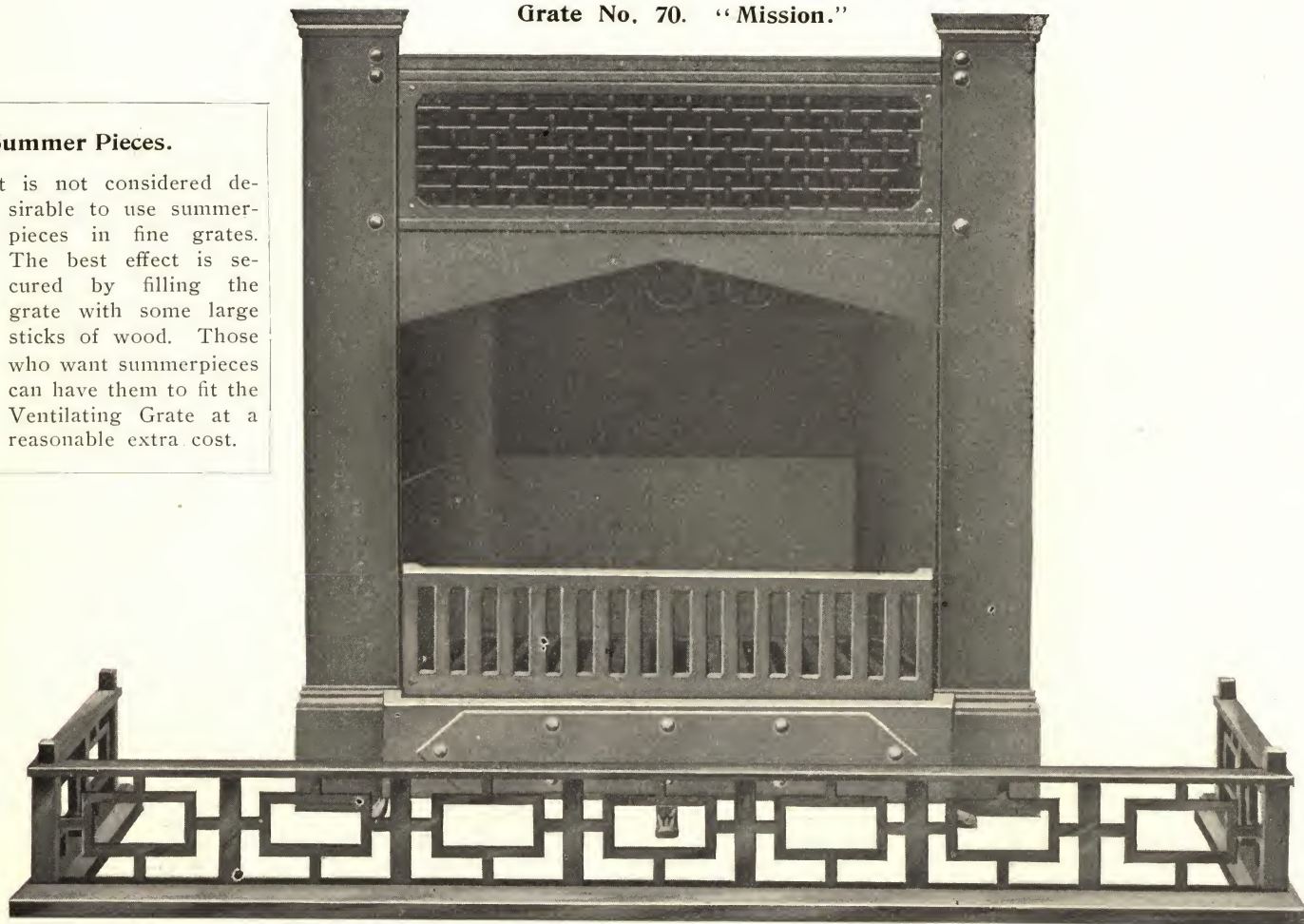
(Add \$5 extra for No. 3 size Grate; \$20 extra for No. 5 size.)

Concord Grate,	Black,	\$53.00	Rustless,	\$60.00	Plated,	\$65.00	Solid Brass,	\$100.00
Oliver	"	59.00	"	66.00	"	71.00	"	106.00
Fender is extra,	"	50.00	"	60.00	"	70.00	"	100.00

Grate No. 70. "Mission."

Summer Pieces.

It is not considered desirable to use summerpieces in fine grates. The best effect is secured by filling the grate with some large sticks of wood. Those who want summerpieces can have them to fit the Ventilating Grate at a reasonable extra cost.



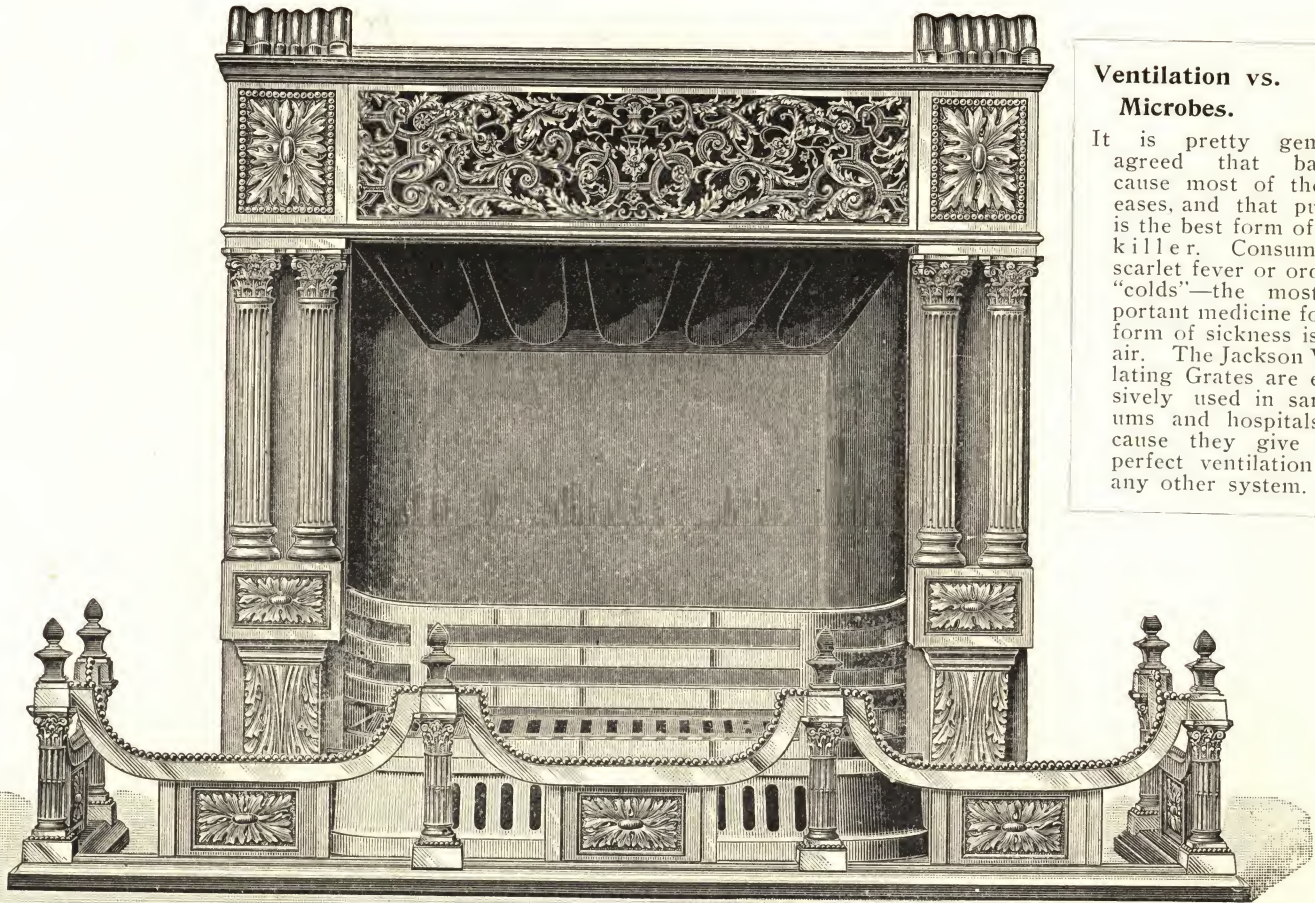
NOTE.—The basket and crown will be same finish as the frame, and all bolt-heads and fender-knobs will be copper, except when ordered to the contrary. The cap and base molding of the frame will be made in solid copper bronze for \$4.00 extra. In the No. 5 size the basket projects out 3 inches further.

Net Cost of Grate No. 70 in No. 0 and No. 1 Size.

(Add \$5 extra for No. 3 size Grate; \$20 extra for No. 5 size.)

Concord Grate,	Black,	\$47.00	Rustless,	\$53.00	Plated,	\$57.00	Solid Bronze,	\$87.00
Oliver "	"	53.00	"	59.00	"	63.00	" "	93.00
Fender is extra,	"	12.00	"	15.00	"	20.00	" "	25.00

Grate No. 71. "Corinthian."



**Ventilation vs.
Microbes.**

It is pretty generally agreed that bacteria cause most of the diseases, and that pure air is the best form of germ killer. Consumption, scarlet fever or ordinary "colds"—the most important medicine for any form of sickness is pure air. The Jackson Ventilating Grates are extensively used in sanitariums and hospitals, because they give more perfect ventilation than any other system.

W. QUICK. ENG'Y.

NOTE.—This frame is 2 inches wider than corresponding size number shown on page 11. The columns are free-standing, so that the cornice stands out a full 3 inches.

Net Cost of Grate No. 71 in No. 1 Size.

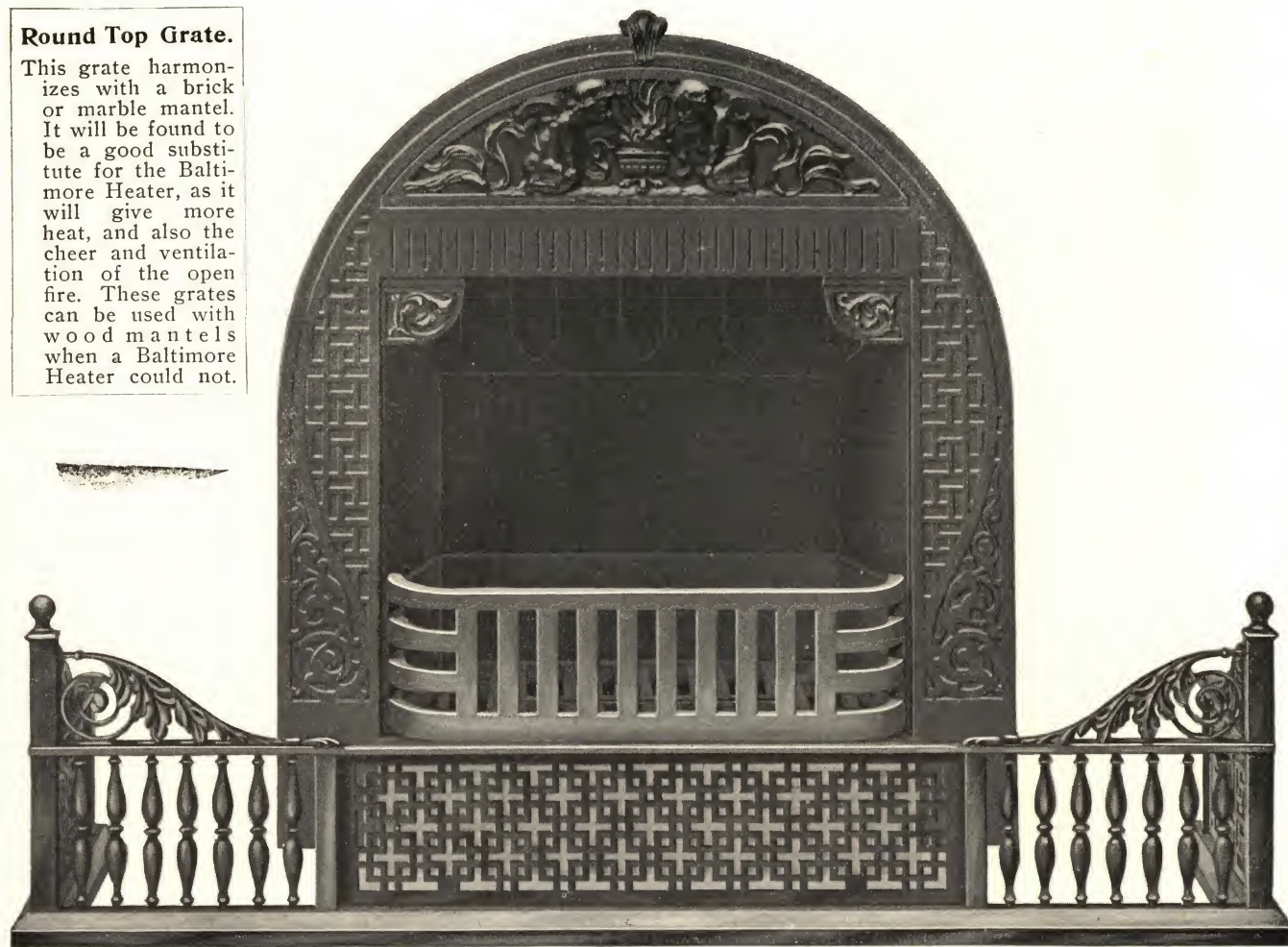
(Add \$5 extra for No. 3 size; \$20 for No. 5 size.)

Concord Grate, Black, Solid Brass or Solid Bronze,	\$145.00
Oliver " " " " " "	151.00
Fender is extra, " " " " " "	55.00

Grate No. 82. "Circular."

Round Top Grate.

This grate harmonizes with a brick or marble mantel. It will be found to be a good substitute for the Baltimore Heater, as it will give more heat, and also the cheer and ventilation of the open fire. These grates can be used with wood mantels when a Baltimore Heater could not.



NOTE.—The back of this Grate is not identical with that shown on pages 6 and 7.

Net Cost of Grate No. 82, Frame 30½ inches wide, 33¼ inches high.

Concord Grate,	Black,	\$45.00	Rustless,	\$52.00	Plated,	\$55.00	Solid Brass,	\$80.00
Oliver	"	51.00	"	58.00	"	61.00	"	86.00
Fender is extra,	"	22.00	"	25.00	"	33.00	"	55.00



New Style Jackson Ventilating Grate.

THIS and the following five pages show a form of Ventilating Grate that is entirely different from that of the preceding pages.

This Grate will fit any fireplace having an ashpit, and the frame may be larger, oval, circular, or, if desired, omitted altogether.

It burns any kind of fuel, and the draft secures perfect combustion, the result being the maximum heat that is possible to be secured from the fuel. It is especially adapted for use with soft coal and with wood.

These Grates heat an entire house better and cheaper than a furnace will. Send for reports in proof of these statements.

CONSTRUCTION.

The new style Jackson Ventilating Grate, front views of which are Plates 90, 91, 92, 93.

The special and striking feature of this Grate is that the top of the fire is level with the floor. The firepot holding the fuel is sunk down in the brickwork. As in the other style of Ventilating Grate cold air enters below, passes around the fire (being separated by a heavy iron casing with absolutely *no* joints for leakage of gas) and out through register in frame of Grate. In the Oliver pattern a connection is made for hot air pipe running inside the smoke flue, to heat room back of Grate, or on second floor.

Each of these Grates will heat about 7,000 cubic feet of space, or three rooms of good size in average exposure. They will heat an entire residence with less fuel than the cellar furnace, and they will give over four times the heat of ordinary open fires using the same fuel.

These Grates do not require a special construction, but can be set in any fire-place—whether new or old—that has an ashpit.

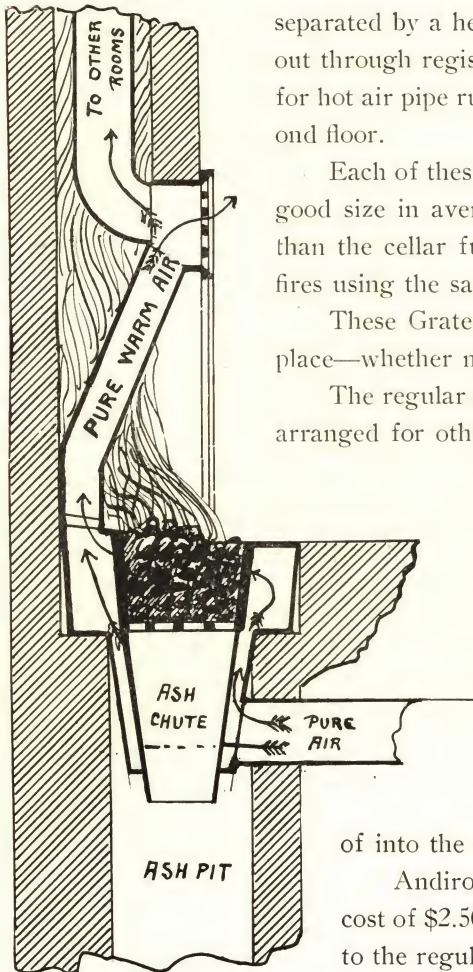
The regular size is for fireplace 30 x 30 inches, but, at an extra cost, they can be arranged for other sizes and shapes.

Designs shown on pages 23 to 28, inclusive, are the ones to be used with this back, and these designs cannot be used on any other back, except at extra cost. Special designs in brass or bronze will be forwarded if desired.

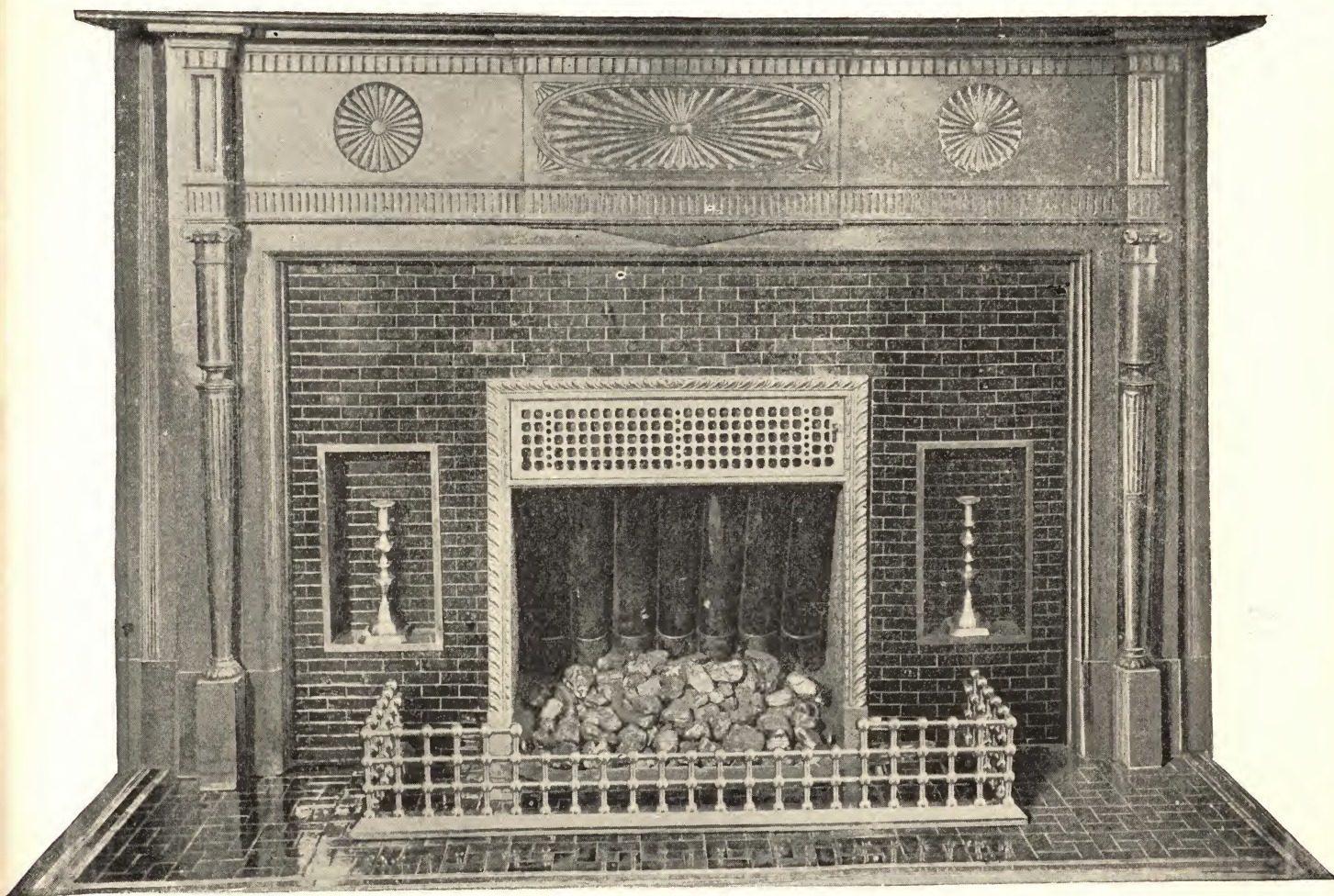
The front view is attractive and novel; a bright, open Grate with the fire level with the floor, giving intense heat and perfect ventilation.

These Grates, as well as the other Ventilating Grates, are absolutely safe. The fire being surrounded by a cold air chamber, the heat is carried into the room in the form of warm air instead of into the brickwork around the fire as in the ordinary open fireplace.

Andirons may be used in the Grate, a plate being furnished at an extra cost of \$2.50 to cover over the Grate opening. This gives an appearance similar to the regular open fireplace. The ashtrap is not needed with this style of Grate.



Grate No. 90. "Furnace."



VIEW OF GRATE SET IN MANTEL.

OPENING OF FRAME IS 27 INCHES.

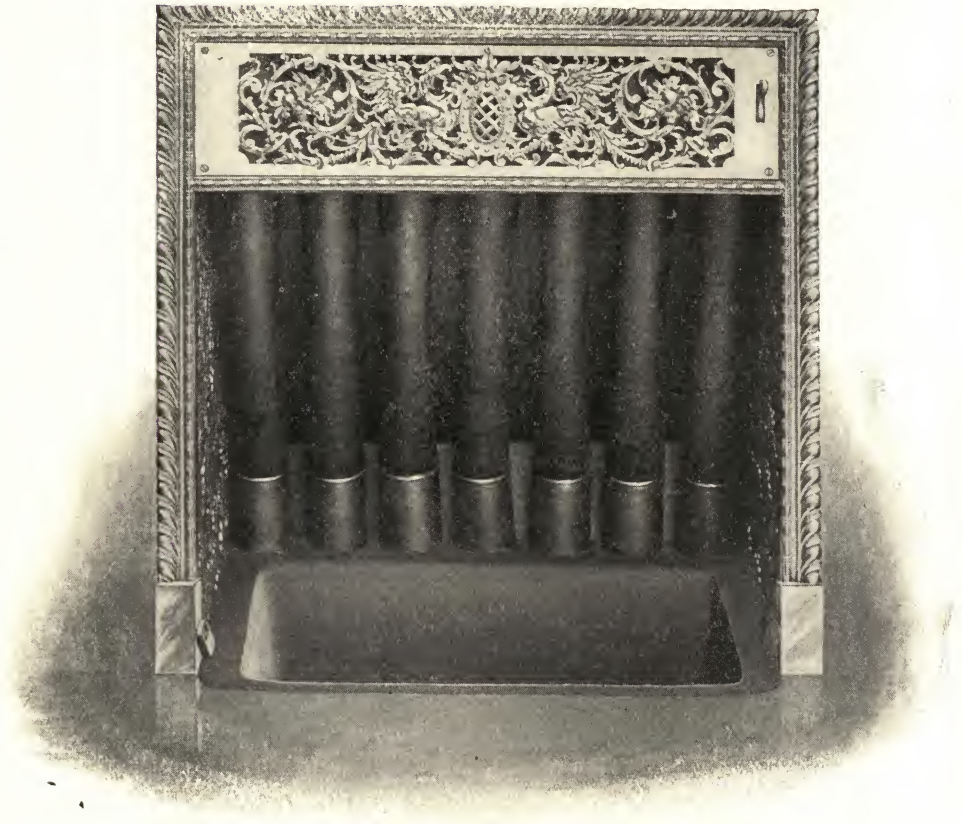
Net Cost of Grate No. 90, Fitting Fireplace, 30 x 30 inches. Larger Sizes Made to Order.

Concord Grate,	Black,	\$55.00	Rustless,	\$60.00	Plated,	\$63.00	Solid Brass,	\$77.50
Oliver	"	61.00	"	66.00	"	69.00	"	83.50
Fender is extra,	"	22.00	"	25.00	"	33.00	"	35.00

Grate No. 91. "Subfloor."

An Odd Fireplace.

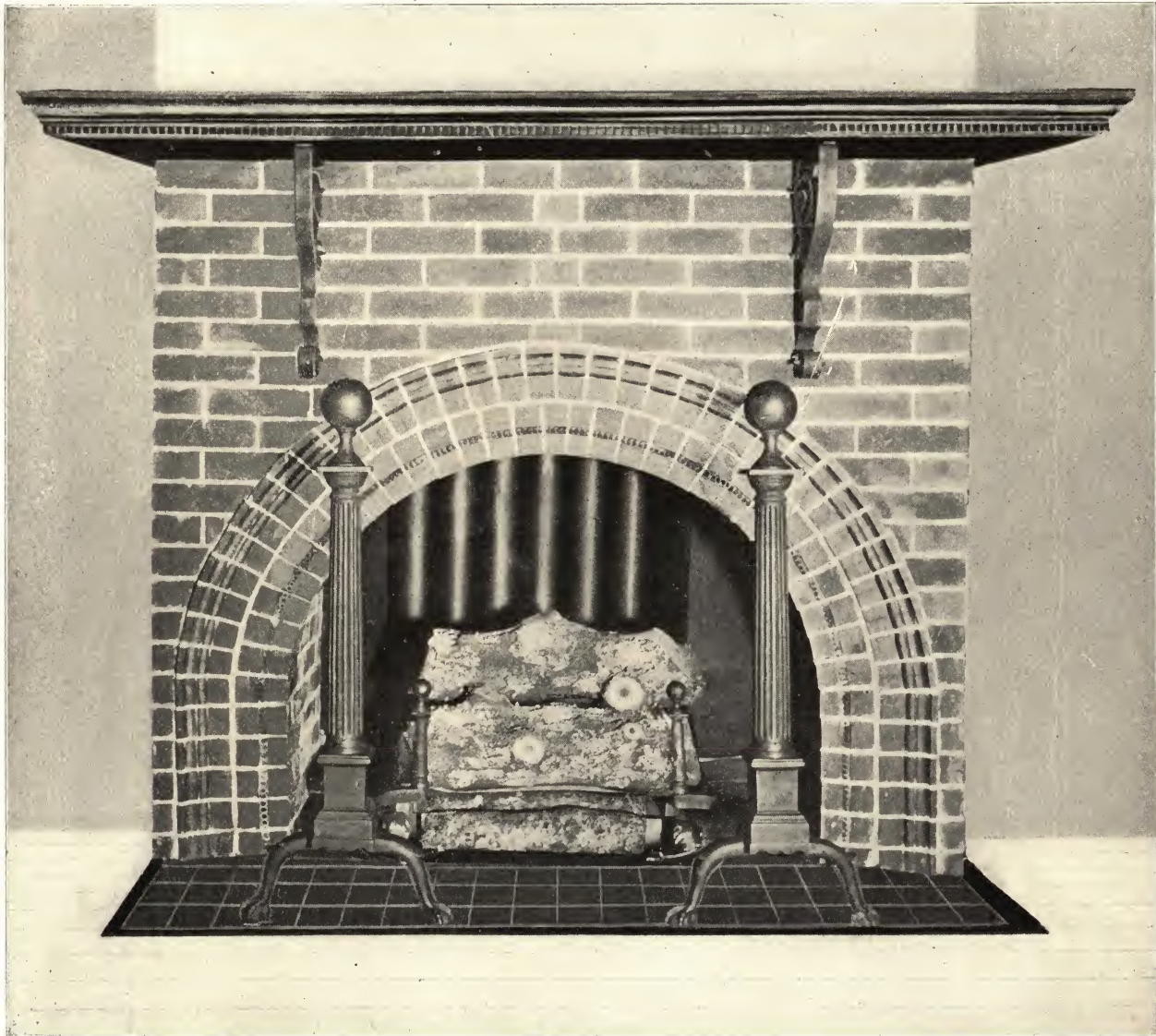
Every one who sees this style in use expresses surprise at the beautiful fire and the low level of the coal. This Grate can be adapted to any style of fireplace, large or small, square or round, and the results are always most satisfactory. The frame can be omitted entirely on No. 92, if desired, for brick fireplace, as shown on the following page.



Net Price of Grate No. 91, Fitting Fireplace, 30 x 30 in. Larger Sizes to Order.

Concord Grate,	Black,	\$55.00	Rustless,	\$60.00	Plated,	\$63.00	Solid Brass,	\$75.00
Oliver "	"	61.00	"	66.00	"	69.00	" "	81.00

Grate No. 92. "Rustic."



NOTE.—This is the No. 90 without Frame.

It can be used in any style of fireplace that has an ashpit. The firepot, which is below the hearth level, remains the same in all cases, but the fireplace opening can be any size or shape desired. The Mantel may be of any desired material. The warm air enters the room through a register over the Mantel, or goes to a room above, or both.

Net Price of No. 92, with one Register, \$55.00. Extra Register Box and Elbow, \$1.50 Net.

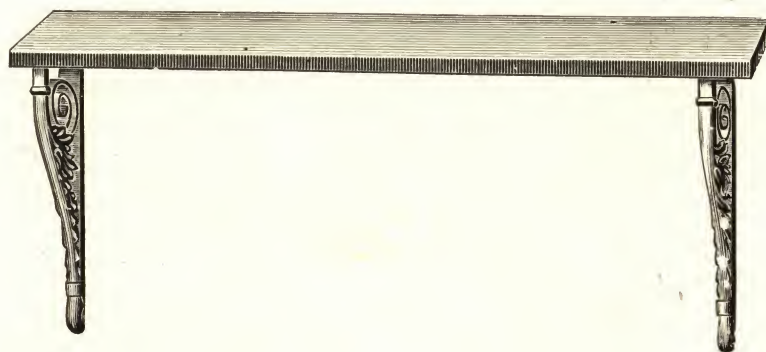
Grate No. 93. "Beekman."



This shows one of the many arrangements possible with the Grate described on pages 23 and 24. The Mantel may be of any character desired, but by using this Grate the usual waste heat is saved and perfect ventilation secured. We should be glad to submit price on this Mantel, either with or without the Ventilating Grate.

MANTEL PROTECTORS.

THE Jackson Ventilating Grate is more safe with a wood mantel than is any other form of grate, or fire-place heater. This is because the heat that ordinarily goes into the brickwork, and so making the backing of the mantel very hot, is, in the Ventilating Grates, brought into the room in the form of warm air. Mantels of wood are sometimes made to overhang the fire in such proximity that the finish is scorched or blistered. This is not due to the warm air, but to the radiant heat of the fire. To prevent this we make a

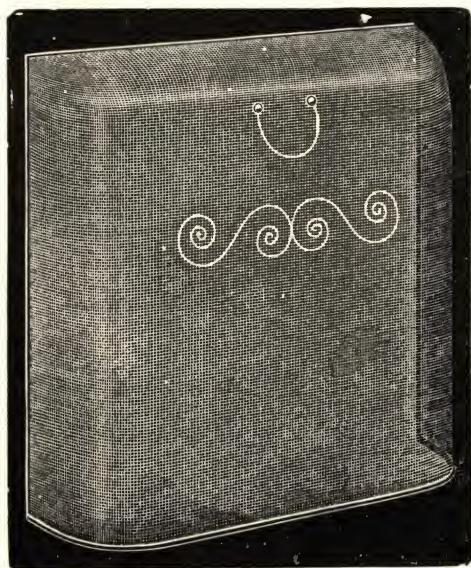


mantel protector, which is in the form of a shelf and brackets, as shown in the above cut. This is readily put on any of our grates by slightly loosening each corner of the frame at the top sufficiently to allow the hooks on the mantel protector to slip back of the frame of the grate.

These protectors are ornamental, and add to rather than detract from the beauty of the grate. They are made in all except No. 5 size, for \$4.00 in black; rustless or plated, \$5.00; in solid brass or solid bronze (polished shelf and chased brackets), \$10.00. No. 5 size costs \$1.00 extra.

The effect of mantel protector can be seen in Plate 33, except that protector has narrow bracket on either side of the frame instead of the wide brackets on the front of the frame, as in Plate 33.

SPARK GUARDS.



FOR protection against fire that may be occasioned by the sparks that are frequently thrown from wood fires, especially those of hickory or pine wood, also against children setting their clothes on fire when playing near the grate, also for providing an absolute sense of security when fires are left burning over night, we make a Spark Guard, as shown in the annexed cut, closing the entire opening of the grate with a screen of wire cloth (3/16-inch mesh).

This, in the best grade, called "Excelsior," is heavily brass bound, so is durable and of sufficient weight to sit firmly against the grate. It is made in japanned wire cloth, ornamented with polished brass handles, etc., also in real brass wirecloth.

Spark Guards of cheaper make than those shown may be had for \$1.50 each, fitting all except No. 5 size Ventilating Grates, and while far inferior to our Screen are equal to those sold by many other firms.

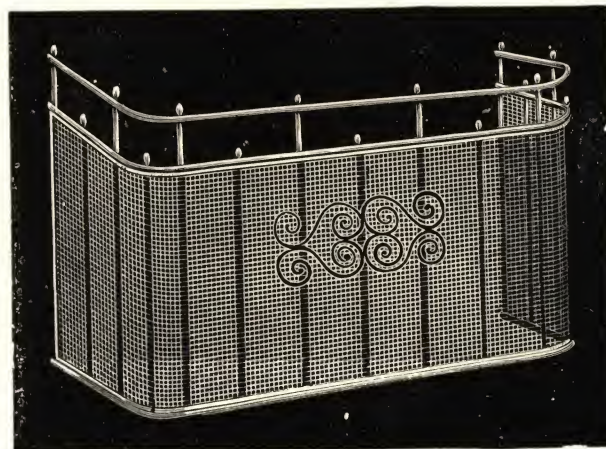
Excelsior.—No. 0, 1, 3 size..	Japanned, \$4.00 net.	Brass, \$7.00 net
" " 5 size.....	" 6.00 "	" 9.00 "
Ordinary.—No. 0, 1/2, 1, 3 size	" 2.50 "	" 5.50 "
" " 5 size	" 4.00 "	" 8.00 "

This style of screen is also made in sizes and shapes to fit around stoves, radiators, etc., and can be had in any width or height.

BEEKMAN SPARK FENDER.

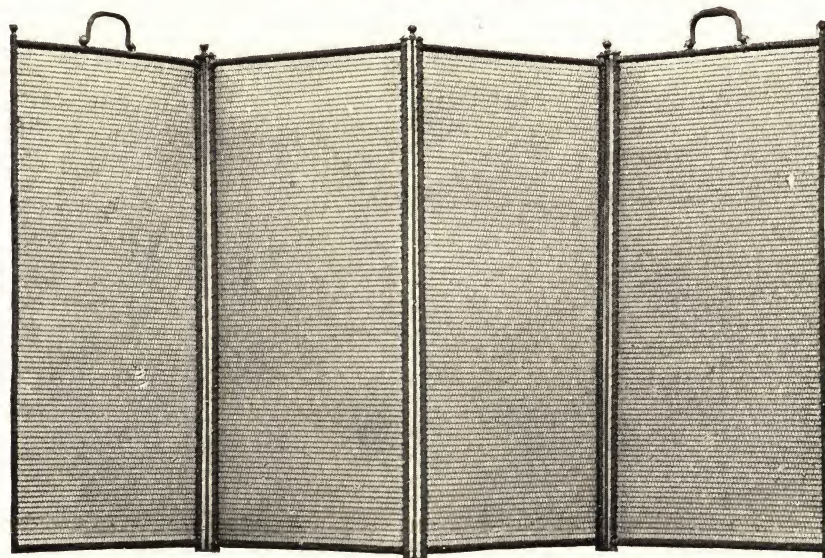
This fender is made on the style of the Colonial hearth screen. The heavy wire netting is japanned or brass, as preferred, but in all cases the base and all exposed parts at the top are made of brass. Special sizes made to order.

Height	Length.	Japanned.	All Brass.
24 inches	36 inches	\$9.60 net	\$12.80 net
24 "	42 "	11.20 "	16.00 "
24 "	48 "	12.80 "	17.60 "
24 "	54 "	14.40 "	19.20 "



FOR OPEN FIREPLACE.

FOLDING SPARK SCREENS.

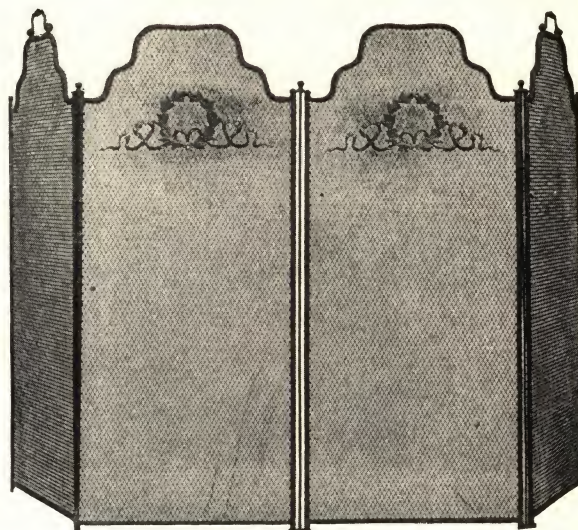


STYLE No. 2.

Each fold is a foot wide. A four-fold screen, allowing one fold for each end, covers either a Ventilating Grate or ordinary fireplace, and a five-fold covers a three-foot fireplace. We can supply as many folds as desired.

Net price per fold. Ornaments 50 cents each extra:

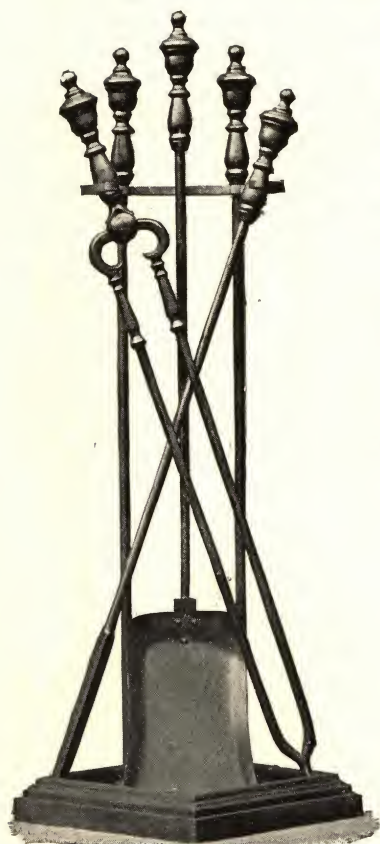
Style.	Height.	Black Brass Per Fold.	Imitation Brass Per Fold.	Real Brass Per Fold.
No. 1	20 in.	\$0.40	\$0.45	\$1.00
" 2	20 "	.65	.70	2.40
" 2	24 "	.85	.90	3.20
" 2	30 "	1.20	1.25	4.80
" 2	36 "	1.60	1.70	6.00
" 2	42 "	2.00	2.10	7.50
" 3	24 "	1.10	1.15	3.60
" 3	28 "	1.60	1.70	4.40



STYLE No. 3.

Other designs of unusually handsome real Brass French Folding Screens forwarded if desired.

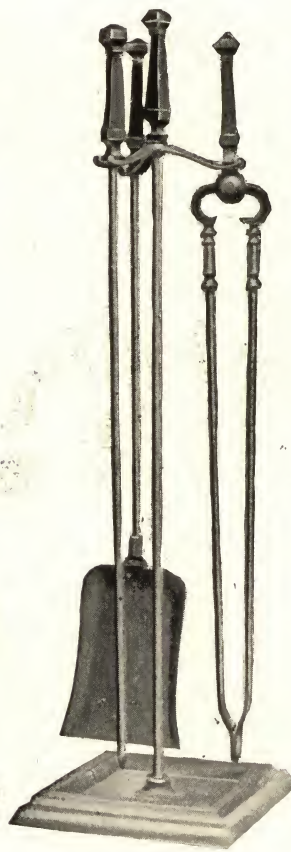
BRASS AND STEEL FIRESETS.



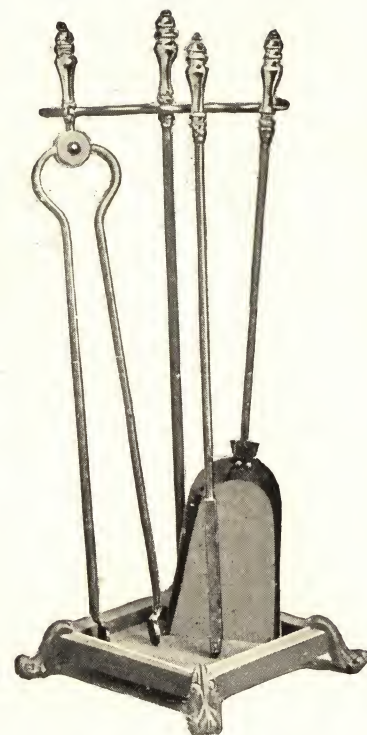
No. 55. 33 ins. high, \$9.00.



No. 50. 32 ins. high, \$7.50.



No. 52. 32 ins. high, \$8.00.



No. 58. 27 ins. high, \$5.00.

Prices are net, and include a black base to stand. If real solid brass base, add \$3.00 to price shown.

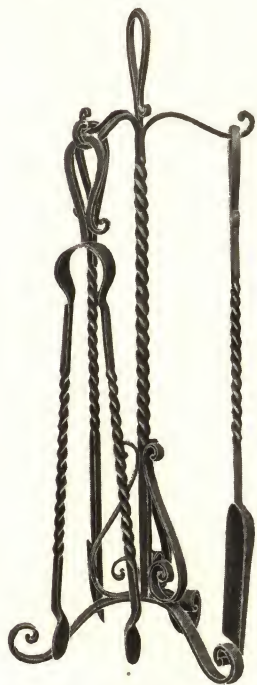
These designs all have the combination of steel shafts with brass heads, resulting in the most attractive and serviceable style of firesets. Stand on No. 55 has the double upright, and is especially good.

For many years we have been making the Jackson poker, shown plate 103, back cover, this being the best to clear ashes from the Ventilating Grates. It is of $\frac{1}{2}$ -inch steel, 31 inches long, and the cost but \$1.25. Recently we completed the set, as shown in design 50 on this page.

These designs can be had in black finish, at somewhat lower prices.

Single pieces can be had separately. Other designs will be forwarded if desired.

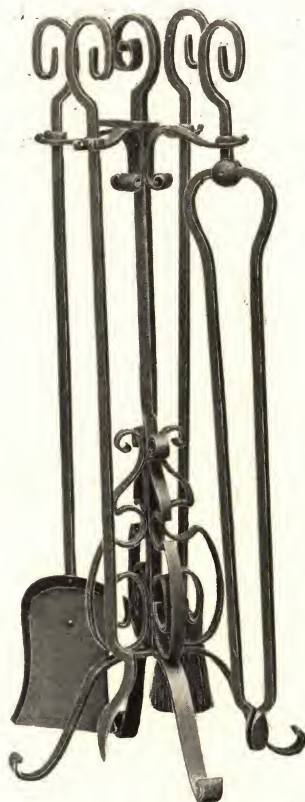
WROUGHT IRON FIRESETS.



No. 5. 31 ins. high, \$5.75.



No. 78. 32 ins. high, \$18.00.



No. 79. 37 ins. high, \$20.00.



No. 77. 36 ins. high, \$15.00.

The prices shown are net, and are for the sets complete, as shown. Separate pieces will be sold if desired.

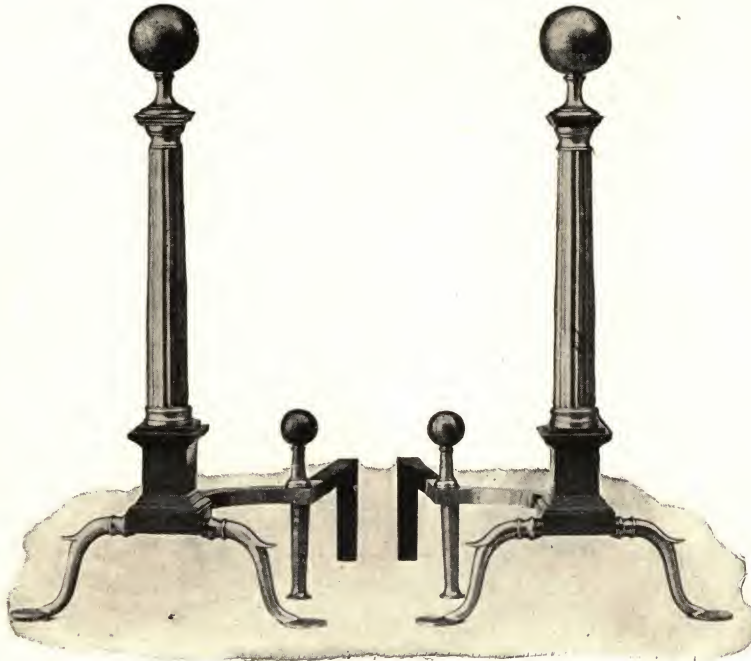
These are all hand wrought, and are, therefore, more artistic as well as more serviceable than the cast-iron sets. The latter are, of course, cheaper, and we can supply sets in cast iron at prices from \$2.10 up.

Those who wish special designs in wrought iron can get from us any style desired, and we will either match your design or submit special drawings.

ANDIRONS.

THERE is the same economy in burning wood in the Ventilating Grates as with other fuels. Not only is four times the heat secured with this system, but also the fire burns without smoke and there are not the cold drafts as with other open fires.

Wood can be burned most conveniently in the regular coal basket. This also results in the best combustion, and the most heat. However, if andirons are preferred, the grate basket can be removed. We have some two hundred designs of brass andirons, and perhaps as many more of cast and wrought iron; and at prices from \$1.25 up.



MT. VERNON

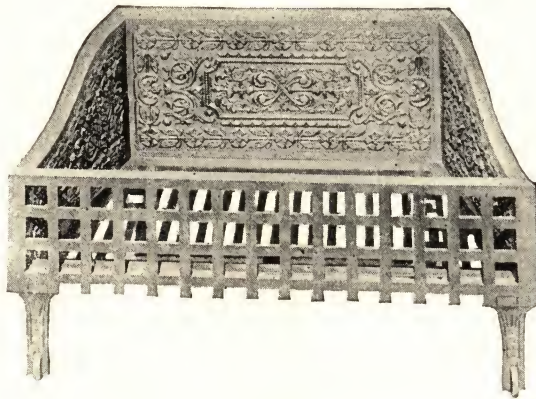
So whatever your taste may demand, we can undoubtedly suit you. The quality is the best—the same as in the andirons made in our grandfathers' time. Advise us what you wish, and we will send photographs, or, if preferred, we will repair or duplicate any you may yourself own.

The design shown is not only most attractive in proportion, but is especially interesting in that the pair in 26-inch height is an exact copy of those in Washington's home at Mt. Vernon.

They are now made in Two Sizes Costing Net as Follows:

26 in. high,	black iron,	\$12.00;	solid brass,	\$24.00
36 " "	" "	20.00;	" "	44.00

PORTABLE GRATES.



THESE are numerous but unsuccessful attempts to realize the economical heating of the Ventilating Grates, one of which is seen in the Portable Grates. These, somewhat like the portable braziers of Spain, Italy and Algeria, are on rollers, so as to be moved about. They stand in the back of the fireplace when the fire is started, but can be pulled forward somewhat, after the heavy smoke has burned off. The net price is \$3.25 for black finish, and front measuring 14, 16, 18, 20 or 22 inches.

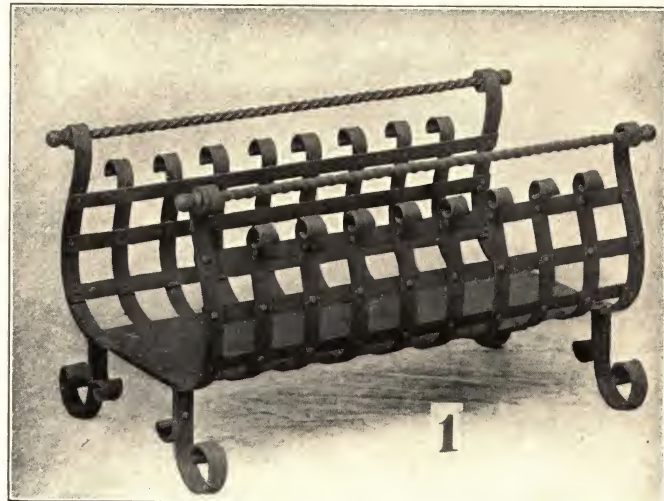
These Grates are not intended to fill the fireplace, but usually are four-fifths the width of the fireplace. Thus for a fireplace 30 inches wide on the front, use a 24-inch Grate. Other designs and sizes are shown in separate catalogue.

WOOD HOLDERS.

This design of Wood Holder is very attractive, and it is a most convenient size and shape for holding logs. It should stand at the end of the hearth, when no fender is used, or at the end of the chimney when the hearth is covered by a fender.

It is usually made in wrought iron, in which the price is \$8.50.

This or other designs can be had in brass.



FRANKLIN STOVES.



THOSE who are admirers of the furniture and decorations of early Colonial days will find the Franklin Stove particularly appropriate for their fireplaces. And those who want the cheer and beauty of the open grate in a room where there is no fireplace will have their wants filled, for these Franklins can be connected by a stove pipe with any chimney. The Franklins give much more heat than does the ordinary grate, and especially when they stand out in the room, as did the originals.

When connected to an ordinary chimney, it is not absolutely necessary to have a protection on the floor beneath the Franklin, although such a covering is desirable. A very satisfactory arrangement is to lay tiling on the floor, and in this way increase the resemblance to a real fireplace.

The designs shown here are all copies of original Colonial patterns, and are ornamented with brass rosettes and solid brass knobs. Special brasses, such as fenders, top rails, more elaborate rosettes or knobs, will be submitted if desired.

Either style may be used, with coal grate or andirons, as preferred, the basket merely resting on lugs. Catalogues of brass and iron andirons will gladly be forwarded.

We reproduce or repair any kind of Colonial fireplace; also we have many Colonial designs of mantels.

Measurements—The Mayflower Franklin.

	No. 27.	No. 33.	No. 40.
Width of Mayflower Across Front.	27½ in.	33 in.	39½ in.
Width of Fire-Chamber at Front.	20 "	23½ "	29½ "
Width of Fire-Chamber at Back.	14 "	18 "	20½ "
Extreme Length Across Hearth...	34 "	39 "	45 "
Extreme Depth Across Hearth....	22½ "	28 "	30 "
Height from Floor to Top of Balls	30 "	32 "	38 "
Height from Floor Without Balls.	25½ "	28¾ "	34 "
Floor to Top of Smoke Collar	24¾ "	27½ "	31 "
Round Pipe Connecting Flue	7 "	8 "	8 "
Size of Smoke Collar (Oval).....	10¾x4	12¼x4¾	18x4

Net Prices: F. O. B. New York.

	No. 27.	No. 33.	No. 40.
Without Andirons or Coal Basket.	\$18.00	\$22.00	\$26.00
Andirons, Black, Iron.....	1.25	1.25	1.25
Coal Basket or Grate.....	2.00	3.00	4.00
Russia Iron Blower.....	1.75	2.00	2.50
Black Spark Guard.....	2.50	3.00	3.50



FRANKLIN STOVES.

IN 1742, Benjamin Franklin invented "an open stove for the better warming of rooms," which apparatus he named the "Pennsylvania Fireplace." While primarily an open stove, the appearance was that of an open grate, as the "machine," as Franklin termed it, was connected with a regular fireplace, and in a regular mantelpiece.

The new feature was the arrangement of heat chambers at the back of the grate, in which outdoor air was introduced and warmed. Franklin says: "The use of these fireplaces in very many houses, both of this and the neighboring colonies, has been and is a great saving of wood to the inhabitants. Some say it saves five-sixths, some say three-fourths and others much less. I suppose two-thirds or one-half is saved; my room is twice as warm with one-fourth the wood as formerly used."

In almost every good Colonial house will be found one or more of these Franklin stoves, and to-day there is nothing more attractive, healthful, or economical than the two forms of grates derived from the Pennsylvania Fireplace.

Changes worked on two lines; one making the Franklin stove, here described; the other becoming the Jackson Ventilating Grate. The latter is the more powerful heater, and is, we believe, the only modern apparatus giving economical heat and perfect ventilation through Franklin's principle of introducing pure air through the open grate.

The Franklin here shown is a copy of an Old Colonial, and like all except a very few actually made by Franklin, has not the air chamber at the back. It is really an open stove; and can be connected by either a stove pipe to an ordinary flue, or set in a regular fireplace. It does not heat so well as a Ventilating Grate, and does not warm more than one room.

It is made in sizes Nos. 17 and 25, the smaller of which does not have the claw feet.



Measurements—The Jackson Franklin.

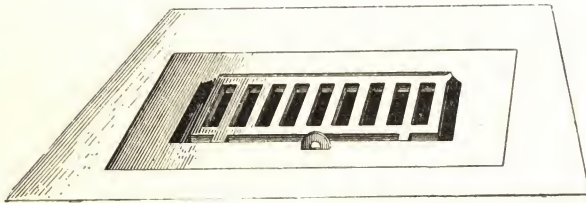
	No. 17.	No. 25.
Width of Fire-Chamber at Front....	16 in.	22 in.
Width of Fire-Chamber at Back....	10 "	16½ "
Extreme Length Across Hearth....	23 "	30 "
Extreme Depth Across Hearth.....	19 "	24 "
Height from Floor to Top of Knobs..	27¾ "	31½ "
Height from Floor Without Knobs..	23¾ "	27½ "
Height from Floor to Smoke Collar...	22½ "	25⅝ "
Smoke-Pipe to Flue.....	6 "	8 "
Size of Smoke Collar.....	6 in. round	14¼x3 oval

Prices.

	No. 17.	No. 25.
Without Andirons or Grate..	\$11.00	\$17.50
Iron Andirons (Mayflower)..	1.25	1.25
Brass Andirons	2.50	2.50
Coal Grate	1.50	3.00
Iron Blower	1.50	2.00
Spark Guard	2.25	3.00

FOR GRATES HAVING ASHPITS.

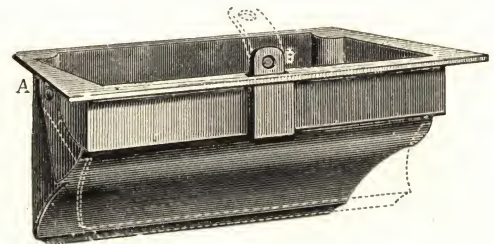
It is the experience of all who use grates connected with ashpits, that unless the masonry of the pits is unusually well constructed, so that there is an entire absence of crevices in the brickwork, and the door below is particularly well fitted, an intolerable nuisance of dust and ashes is experienced whenever the fire is raked. This arises from the fact that when hot ashes are dropped into the cold air of the pit, an upward



current is started, which, drawing its supply through every minute opening of the ashpit, creates a decided draft that wafts the ashes into the room above, depositing dust upon objects surrounding the grate.

To prevent this upward escape of dust, the JACKSON ASH-TRAP, a sketch of which is appended, has been invented. It consists, as is shown, of a rectangular box, the bottom of which fits obliquely upon it, and is adjusted by a pivoted hinge A, being so arranged that by a slight pressure with a poker on the projection B, the bottom, or valve, is withdrawn from under the ashes, and assumes the position shown by the dotted lines, and when the pressure is removed from B the valve instantaneously closes, excluding all dust from the room. The action is "as quick as a wink," requires the slightest pressure only, and never fails to be effective.

The traps are constructed to fit the JACKSON VENTILATING GRATES, and can be placed in any of them in a few moments by simply taking out the screws from the sifter, removing it from the base of the grate and inserting the trap in its place—requiring no mechanical skill whatever. In all cases, unless otherwise directed, a movable sifter is included, the sifter preventing large coals from entering the trap.



For use in any other fireplace where ordinary grates are used, a border is supplied for holding the trap securely over the mouth of the ashpit. Border 15" long and 9" wide; Trap 13" long and 7" wide.

Cost fitting any size Ventilating Grate, \$1.80; cost for regular grates or open fires, \$2.00.

Circular or cheaper (inferior) styles of ashtraps, also of ashpit doors, will be sent on application.

NOTE: Grates Nos. 90-93 do not need the ash-trap.

COLONIAL DOORKNOCKERS.

WE have secured a half dozen fine old Colonial Doorknockers, and have made in the solid brass exact reproductions. The detail is unusually fine, in fact, of the same high degree of chasing and finishing that characterizes all our fine brass work.



Greenwich.

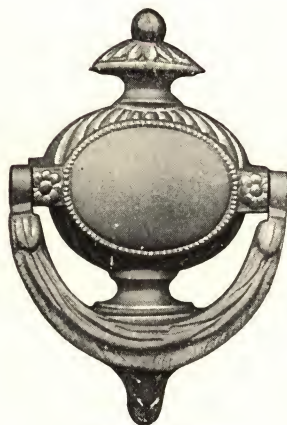


New York.

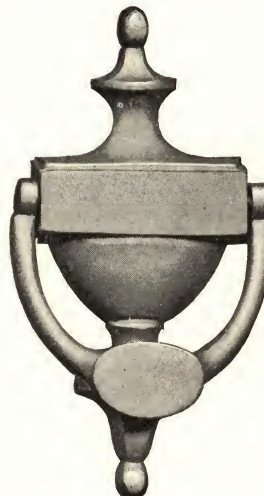
Design.	Size.	Solid Brass or Bronze.	Silver Plated.
Philadelphia	4 x 7½ inches	\$1.75	\$3.00
Cambridge	4½ x 6½ "	2.00	3.50
Boston	3¼ x 5¾ "	2.50	4.00
Price	4 x 7½ "	1.75	3.00
New York	5 x 8 "	3.50	5.00
Greenwich	4½ x 9 "	4.00	6.00



Boston.



Cambridge.



Price.



Philadelphia.

THE JACKSON DOME DAMPER.

These are not needed with the Jackson Ventilating Grate.



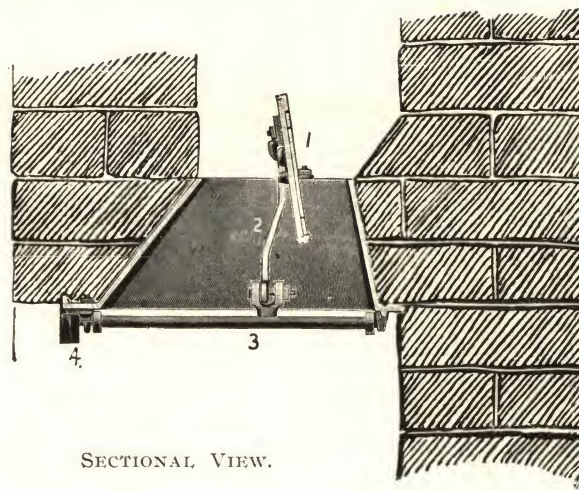
There are frequent attempts made to save the waste heat of the open fireplace by means of dampers. These are all of little use, as the closing of the damper makes the smoke enter the room. The Jackson Ventilating Grate solves the problem by letting the smoke out, but by extracting the heat from the smoke first.

These dome dampers are intended for the ordinary open fireplace, and they are much better than the usual style. They form a perfect chimney throat, as the smooth surface of the iron offers no obstruction to the escaping smoke; yet by means of the valve, the opening can be so closed so that there is no unnecessary loss of heat.

They are usually built in as the brick work progresses, the flange on the front forming a support for the flat arch at the front of the fireplace. It is thus an economy to the builder, as well as to the owner.

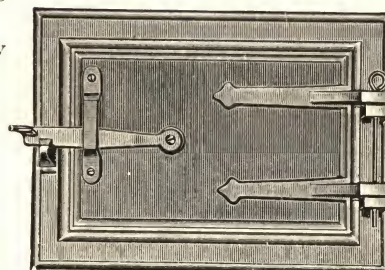
In operation, the door (1) may be partially or entirely opened, as shown in sectional view, by turning the thumb latch (4), which latch is at the front of the fireplace.

There is no shoulder or flat obstruction as in many other dampers.



SECTIONAL VIEW.

ASH PIT DOORS.



The best form of ordinary door is here shown. It is well made, and has good latch and hinges.

They are made in six different sizes. We usually have most of these sizes in stock, and keep a quantity of number 12 on hand.

Sizes and Prices net f. o. b. New York.

Extreme of Flange.			Dome Door	Price
Inch.	Inch.	Inch.		
24	front 21	back 12½ deep.	16½x6	\$2.00
28	front 25	back 12½ deep.	20½x6	2.20
32	front 25½	back 12½ deep.	22 x6	2.50
38	front 31	back 15 deep.	24 x6½	3.60
44	front 36½	back 15 deep.	29½x6½	4.25
50	front 42	back 16 deep.	35 x7½	5.00

LARGER SIZES MADE TO ORDER

Flange is about 3 in. greater than base of dome, so 32 in. length fits usual 30 in. fireplace.

Opening Outside Price.

No. 10	8x6	10x8	\$.80
No. 12	12x10	15x13	1.20

Opening Outside Price.

No. 14	16x12	19x15	\$1.35
No. 15	20x14	23x17	1.50

Four anchor bolts to secure to brick work cost \$1 extra.

WHEN ORDERING

*** THE JACKSON ***
VENTILATING
GRATE

PLEASE STATE:

- 1st. Whether you desire
Concord or Oliver.
- 2d. Size of Grate as designated by number.
- 3d. Style of Finish.
- 4th. Design of Frame.
- 5th. Ashpit or Ashpan.
- 6th. Whether fender
or other goods
are wanted.



EDWIN A. JACKSON & BRO.

50 Beekman Street,

NEW YORK.



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1906



THE
Jackson
VENTILATING GRATE